Aalto University
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Shareholders' nomination boards: Do abnormal returns exist around the holdings revision date?

Master's Thesis
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PURPOSE OF THE STUDY

While corporate governance has received lots of attention in the academic economics and finance literature, board of directors' committees (excluding audit committee) have not drawn the public eye. Even though, board member election is one of the most crucial ways for shareholders to affect how the company is managed, just a handful of studies have been conducted about the different methods of preparing and electing the directors. Since these ways vary from country to country it is no surprise that shareholders' nomination boards, which are mainly used just in Scandinavia, have remained in the darkest shadows of academic literature. In 2015, the Finnish Corporate Governance Code was updated to include shareholders' nomination boards as an equal alternative to the more common, within board nomination committees. After the inclusion, many companies have adopted shareholders' nomination boards and at the end of 2016 already 41 listed firms used it in Helsinki stock exchange. Therefore, it is about the time to shed some academic light to shareholders' nomination boards.

DATA AND METHODOLOGY

A unique dataset is hand collected to study shareholders' nomination boards and their development in Finland. Main data sources are company annual and corporate governance reports. After a thorough descriptive analysis, two different methods are used to examine nomination boards. First, Poisson and negative binomial regression models are constructed to study whether changes in nomination boards' nominators have an effect on the subsequent board member turnover. Then, an event study methodology is used to figure out evidences whether the 'hit-and-run' philosophy is in use in Finland. In 'hit-and-run' philosophy an investor buys large block of shares just before the holdings revision date to secure a seat in the shareholders' nomination board. After that, she promotes new board member candidates that drive short-term value adding methods such as share repurchase plans or higher dividends. When the effect of the artificial short-term value creation is realized in the company stock, the agent collects the profit and moves on to next target.

KEY FINDINGS

The thesis is the first detailed documentation of the shareholders' nomination boards in Finland. Firms that use nomination board are very different in size and come from various industries but have on average highly concentrated ownership among the largest owners. Similarly, the nomination authority is concentrated to the hands of few, mainly to government and large pension funds. In addition, changes in nominators have a statistically significant and positive effect on the following board member turnover. Finally, there exist no indication that 'hit-and-run' philosophy would be used in Finland.

Keywords shareholders' nomination board, corporate governance, nomination committee, board of directors, board member turnover, event study, abnormal returns

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TUTKIELMAN TAVOITTEET

Vaikka yritysten hallinnointitapaa on tutkittu laajasti sekä taloustieteen että rahoituksen saralla, hallitusten komiteat (tilintarkastuskomiteaa lukuun ottamatta) eivät ole saavuttaneet juurikaan huomiota akateemisessa kirjallisuudessa. Tämän lisäksi vain kourallinen tutkimuksia käsittelee hallitusjäsenten valintaa ja sen valmistelua, siitäkin huolimatta, että hallitusjäsenten valinta on yksi tärkeimmistä osakkeenomistajien tavoista vaikuttaa yrityksen hallinnointiin. Ei siis ole mikään yllätys, että osakkeenomistajien nimitystoimikunnat, joita käytetään pääasiassa vain Skandinaviassa, ovat lähes koskematon tutkimusalue. Vuonna 2015 Suomen Hallinnointikoodia uudistettiin siten, että osakkeenomistajien nimitystoimikunnat lisättiin yhdenvertaiseksi vaihtoehdoksi perinteisemmille hallituksen jäsenistä koostuville nimitysvaliokunnille. Uudistuksen jälkeen useat yritykset ovat ottaneet käyttöön kyseisen hallinnointitavan ja vuoden 2016 lopussa jo 41 listattua yritystä noudatti sitä Helsingin pörssissä. Näin ollen onkin jo aika tarkastella yksityiskohtaisemmin osakkeenomistajien nimitystoimikuntia.

AINEISTO JA METODOLOGIA

Tutkielmaa varten on käsin kerätty täysin uniikki data, osakkeenomistajien nimitystoimikunnista ja niiden kehityksestä Suomessa. Pääasiallisina lähteinä on käytetty yritysten vuosikertomuksia sekä selvityksiä hallinnointi ja ohjausjärjestelmistä. Yksityiskohtaisen deskriptiivisen analyysin jälkeen, kahta erilaista tilastollista tutkimusmenetelmää hyödynnetään tutkielmassa. Ensiksi Poisson sekä negatiivista binomi -regressiomallia käytetään, sen tutkimiseen, vaikuttavatko muutokset nimitystoimikuntien nimittäjissä seuraavan hallituksen jäsen muutosten määrään. Tämän jälkeen tapahtumatutkimus menetelmää hyväksikäyttäen tutkitaan, onko ylisuuria tuottoja tehtävissä osakeomistusten tarkastuspäivän ympärillä. Hypoteesiasettelussa ylisuurien tuottojen oletetaan juontavan juurensa aktivistisijoittajien tai muiden tahojen yrityksestä keinotekoisesti vaikuttaa, nimitystoimikuntia hyödyntäen, yrityksen arvostukseen.

TÄRKEIMMÄT LÖYDÖKSET

Tutkielma on ensimmäinen yksityiskohtainen dokumentointi osakkeenomistajien nimitys-toimikunnista ja niiden kehityksestä Suomessa. Yritykset, jotka käyttävät tätä hallinnointitapaa ovat eri kokoisia sekä tulevat erityyppisiltä toimialoilta, mutta niillä kaikilla on keskimäärin todella keskittynyt omistusrakenne. Samalla tavalla nimitysoikeudet ovat keskittyneet harvojen käsiin, pääasiassa Suomen valtiolle sekä isoille eläkeyhtiöille. Lisäksi, muutokset nimitystoimikuntien nimittäjissä näyttävät vaikuttavan seuraavan hallituksen jäsenten muutoksiin positiivisesti ja tilastollisesti merkitsevästi. Lopuksi, Suomessa ei ole nähtävissä merkkejä osakkeenomistajien nimitystoimikuntien hyödyntämisestä, yrityksen osakekurssin keinotekoiseen ”manipulointiin”.

Avainsanat Osakkeenomistajien nimitystoimikunta, hallintotapa, nimitysvaliokunta, hallitus, hallitusjäsenten vaihtuvuus, tapahtumatutkimus, ylisuuret tuotot

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1. Introduction

The thesis is the first detailed attempt to describe shareholders' nomination boards in Finland using unique hand collected sample. Although the corporate governance model have existed since 2004, there still are only a handful of academic papers handling shareholders' nomination boards (e.g. Carlsson 2007; Johanson and Østergren 2010; Poulsen, Strand, and Thomsen 2010) and only one that focuses on the Finnish companies (see Viskari 2014). Therefore, the thesis is a pioneering attempt to study the corporate governance model that is more widely in use in Finland than ever before.

Shareholder's nomination boards are alternatives to the nomination committees that are formed among the company board of directors. Both of these groups main task is "to prepare matters pertaining to the appointment and remuneration of board of directors" (Finnish Securities Market Association, 2015). The difference is that shareholder's nomination board "consists of the company's largest shareholders or persons appointed by the largest shareholders" (ibid). Some Finnish public listed companies have adopted shareholders' nomination boards already in 2004. Among the early adopters were Exel Composites Oyj, Fortum Oyj and Metso Oyj, and in 2016 there are 41 public listed companies (37 of them following the Finnish Corporate Governance Code) in the OMX Helsinki that are utilizing this corporate governance method.

The research is carried out with Finnish data since the shareholders' nomination boards are not widely used anywhere else than in Scandinavia. The same format for shareholders' nomination boards is actually only in use in Sweden, where the election committees "valberedningar" have been part of the corporate governance code since 2004 (Code Group, 2004). To mitigate the impact of country specific features as well as differences in the corporate governance codes and guidelines from distorting the results, the study is limited only to Finnish companies.

The recent two changes in the Finnish Corporate Governance Code, first in 2010 and then in 2015, have driven the implementation of shareholders' nomination boards, especially among smaller and non-government owned companies. The firms that use shareholders' nomination board are very different in their size and come from various industries. A shared feature of these companies is that the ownership is highly concentrated among the largest owners, the largest three shareholders own on average 37% of all the votes. Similarly, the nomination power is concentrated in the hands of few since the three largest nominators; Keskinäinen Eläke-vakuutusyhtiö Ilmarinen, Finnish Government, and Keskinäinen Työeläkevakuutusyhtiö Varma, have chosen more than half of all the nominees in the past. The largest ten nominators

measured by all-time nomination count consist of four pension funds, three private investment groups, the investment funds of Nordea Bank and OP Group, as well as the Finnish Government.

Another finding of the study, which neither has been researched before, is that changes in shareholders' nomination boards have a statistically significant effect on changes in the subsequent board of the company. The relationship is positive, meaning that the more there are changes in the nominators, the more there are also changes in the following board. Even after controlling for variables that previous literature has shown to have an effect on the board member turnover, and after robustness checks, this relationship remains positive and significant. Therefore, shareholders' nomination boards seem to work as a corporate governance model as intended. The largest shareholders have the power to oversee and affect company management, indirectly via board member election process. Even though the largest shareholders often get the shareholders' nomination board seats, it is possible for smaller owners to gather their votes together and that way get a seat to the nomination board. Additionally, the annual general meeting elects always the new board of directors so the minority shareholders have their saying even without having a seat in the nomination board. As stated by Poulsen, Strand, and Thomsen (2010), shareholders' nomination boards work as vehicles that enable negotiated compromises between the minority and large shareholders.

In addition to the thorough descriptive analysis of shareholders' nomination boards, the thesis evaluates, with an event study approach, whether positive abnormal returns exist before the holdings revision dates[1] of shareholders' nomination boards in Finland. The intuition is that the largest shareholders compete to get their nominees into the board of directors. This competition, even though being totally unrelated to the company fundamentals, then drives the share price up and produces abnormal returns before the holdings revision date. One possible party whose behavior might have an effect on the share price just before the holdings revision date are the short-term activist investors. Carlsson (2007) states that in Sweden some short-term activists boost their ownerships at the time when the shareholders' nomination boards are supposed to be constituted. By doing that, activists receive power in the nomination board and can promote board of directors' candidates who will push the agenda of short-term value creation, through for instance higher dividends or share repurchases. Shortly after achieving their goal, the

[1] On holdings revision dates, the share ownerships are evaluated and the largest shareholders, who get the right to nominate a member into the shareholders' nomination board, are determined. These dates are predetermined and the Finnish Corporate Governance Code requires their disclosure.

investors cash-in the short-term value increase and move onto the next target (ibid). According to Carlsson, this kind of behavior is called the 'hit-and-run' philosophy. Since shareholders' nomination boards enable this kind of disadvantageous behavior in the first place, it should be studied whether 'hit-and-run' philosophy is practiced also in Finland.

To answer comprehensively to the research question four testable hypothesis were formed. The first hypothesis is a test for the positive abnormal returns before the holdings revision dates in general. In the second and third hypothesis, the thesis evaluates whether a change in the shareholders' nomination board would lead to abnormal returns, or would the non-government ownership in companies that use the shareholders' nomination board be a cause of positive abnormal returns before the holdings are revised. Finally, the last hypothesis is a combination of the second and third hypothesis, testing their joint effect.

The results are relieving since none of the tests indicates that shareholders' nomination boards would be exploited as a loophole for short-term gains. There was no evidence against the first three hypotheses, and they all remained valid. In the fourth hypothesis test, the results were inconsistent due to the statistically significant positive event day abnormal return and the negative cumulative abnormal returns before the event day. However, a further analysis of the ownership changes ruled out the possibility that the positive event day abnormal return would have been caused due to last minute trading by the largest shareholders. Another interesting finding of the thesis is that firms with shareholders' nomination board appear to produce negative cumulative abnormal returns that are statistically significant around the holdings revision date in the medium-term (41 trading days' event window). The result is counterintuitive since the negative cumulative abnormal returns become statistically significant even before the holdings revision dates, in some of the tests, indicating that shareholders are selling more shares just before the nomination board places are determined. One plausible explanation might be the highly concentrated ownership among the companies with shareholders nomination board, which leads to a situation where the minority shareholders might not give a hoot about the shareholders' nomination board places in their investment decisions.

The thesis is organized in such a way that the second chapter takes a look at the existing literature and explains the relation to that. In the third chapter, the data collection and formation processes are explained. The fourth chapter introduces the recent changes in the Finnish Corporate Governance Code, evaluates the shareholders' nomination boards in Finland, and

models how changes in nominators affect changes in the subsequent board members. The fifth chapter is about the research question formation as well as laying out testable hypotheses. In the sixth chapter, different event study methodologies are introduced and the chosen method is explained in detail, while the following chapter presents the empirical results. Finally, the conclusions are drawn and the further research avenues are proposed in the last chapter.

2. Relation to the existing literature

Governance is a field of academic research that invokes interest from many different sciences including economics, sociology, psychology, politics etc. Corporate governance is a subcategory of the governance literature, with focus on economic entities and their governance. There are many various ways to define corporate governance, and one of the most cited is the one by Shleifer and Vishny (1997), "Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". Their definition is that corporate governance ensures the needed basis for efficient financial markets and as noted by Melgin (2016) it does not make a distinction between equity holders and creditors. Additionally Melgin (ibid) reports a very detailed introduction to theories of corporate governance, beginning from the agency theory and its roots, continuing to the changes and additions to the agency theory, and finally landing to alternative view to the agency theory such as stewardship theory (Davis, Schoorman and Donaldson 1997) and behavioral approach (Huse 2007).

While the theories of corporate governance have attracted a lot of interest among the researchers there remain many undiscovered subjects in the field of corporate governance. As one of them, shareholders' nomination boards have not received that much attention in the academic research for the obvious reason that they are primarily used in the Scandinavian countries, mainly in Finland and Sweden. While other board committees have been studied since the mid-1990s in many researches, especially the audit committees have inspired multiple studies, the nomination committees as whole have been by far the least studied board committee (Kaczmarek and Nyuur, 2016). Therefore, this study is an attempt to widen the knowledge of the less researched part of the corporate governance literature. In addition, since the Finnish Corporate Governance Code changed in 2015 the topic of the study is current and should be devoted some more attention, at least in Finland.

Most of the studies covering nomination committees have focused on the effect of nomination committees' structure to the board of directors' nominations. For example, Vafeas (1999) finds

that having a nomination committee will not influence the number of outsider directors appointed to the boards but instead can influence the independence of the chosen outside directors. Eminet and Guedri (2010) evaluate how the CEOs' influence affects the nomination process and nominated members of the board of directors, concluding that independent nomination committees are capable of reducing the CEOs' influence and appoint more directors that actively exercise control over managers. Baldenius, Melumad, and Meng (2013) divides the directors into monitoring and advisory categories, and finds out that if the board is nominated by shareholders they may assemble an adviser-heavy board to avoid CEO entrenchment. Contrary, if the CEO has the control over the nominations the board will more likely be monitor-heavy, constraining the empire-building of the CEO (ibid).

According to Ruigrok, Peck, Tacheva, Greve, and Hu (2006), companies that have implemented nomination committees are more likely to appoint more independent and foreign board members, while the same does not apply for the number of female directors. Furthermore, the existence of nomination committee is positively related to the degree of nationality diversity but has no association with the educational diversity (ibid). On the other hand, Kaczmarek, Kimino and Pye (2012) found out that the more females or foreigners in nomination committees the higher is the level of board gender and nationality diversity. Both of these studies used European data, UK and Swiss respectively. Johanson and Østergren (2010) compare the differences between Swedish and British board independence and conclude ways that local corporate governance principle setters can improve the regulative frameworks.

The paper by Poulsen, Strand, and Thomsen (2010) evaluate the relationship between voting power and shareholder activism. They find out that the Swedish model of shareholders' nomination boards increase shareholder activism. In addition, they emphasize that the nomination boards are vehicles that enable negotiated compromises between the small shareholders and controlling block holders. This is followed from the fact that, even though large shareholders most of the time dominate the nomination committee they still transparently elect the committee at the annual general meeting so that small shareholders would have their say in the matter (ibid). Additionally, small shareholders can organize themselves as a consortium and reach enough votes to capture a seat in the shareholders' nomination board.

In the Finnish context, the study by Viskari (2014) has been the most influential research, so far, related to the shareholders' nomination boards. In her research, Viskari compares 55 Finnish and 55 Swedish public companies, and finds out that the nomination method has a

remarkable effect on the overall board diversity. In more detail, the shareholder nominated boards have more likely higher age, gender, and nationality diversity. While Viskari makes a pioneering work in comparing shareholders' nomination boards and nomination committees among the board of directors, her approach does not reveal much about the shareholders' nomination boards in Finland. That is because she includes only seven Finnish firms that have shareholders' nomination boards into her sample. Additionally, all of them are government owned companies.

In the context of nomination committees and shareholders' nomination boards, previous academic literature focuses mainly on the diversity of boards and comparing the corporate governance methods between different countries. On top of that and more related to the study in-hand there are researches about the determinants of board of directors. The paper by Hermalin and Weisbach (2003) gathers the main findings together. Noteworthy thing about these studies is that severe limitations for cross-sectional analysis of board structures are caused by joint-endogeneity issues, because any variable that is cross-sectionally related to the board composition is probably jointly determined with board composition (ibid). Nevertheless, cross-sectional correlations seem to be robust throughout various samples and have been studied and reported by numerous papers, including but not limited to Weisbach (1988), Hermalin and Weisbach (1988), and Denis and Sarin (1999). The consensus seems to be that companies with insider-dominated boards appear to be those that are "tightly held" i.e. where the founders are active and the CEO is a large owner. Contrary, more mature and larger companies, with scattered ownerships, have more likely professional management and outsiders as a majority in their boards. Finally, Hermalin and Weisbach (2003) note that there are little evidence to point that board composition would have any cross-sectional relationship to firm performance.

How the changes in a firm's characteristics and performance influence the subsequent board composition, was studied by Hermalin and Weisbach (1988). Particularly, they were interested in the changes of inside directors and outside directors separately. The main findings were that poor firm performance increases the likelihood of insiders to leave the board and outsiders to join the board. Additionally, the CEO succession process appears to be tightly related with the board selection process. At the time when a CEO nears retirement, more inside directors join the board to compete for the next CEO nomination. On the other hand, right after a CEO change, more insiders have a tendency to leave the board, consistent with the hypothesis that they are the losing candidates of the "CEO race". Finally, when a company leaves a product market, inside directors tend to depart the board while outside directors tend to join it. (ibid) Denis and

Sarin (1999) confirmed the findings of Hermalin and Weisbach, and concluded that large changes in the composition of boards happen after abnormally poor performance, corporate control threats, as well as around top executive changes. In contrast, firm-specific determinants such as firm size, variance of stock return, capital structure, and growth opportunities seem to have only a weak relation to the board composition and to changes in ownership. Denis and Sarin conclude that neither board structures or ownership of firms are as stable as is commonly believed.

In her study, Viskari (2014) also evaluates whether the type of nomination committee (sub-committee of board vs. shareholder nominated) has an effect on the director turnover. To my knowledge, this is the only attempt to research the matter, and her results point out that nomination committee type has no significant effect on the director turnover. Rather Viskari confirms the findings of previous literature that mostly CEO change, company performance (return on assets) and board size drive the turnover of directors (ibid).

While shareholders' nomination boards have remained in the shadows of the academic finance research, the event study methodology has been widely used in many finance and economics researches. In fact, the popularity of event studies have been so huge that there exists even a category of financial and econometric literature devoted to the research of event study approaches. The most influential researches in the field are the papers by Brown and Warner (1980, 1985) concluding that the simple methodologies based on market models perform well in many situations and under different conditions. They also provide examples how and where misuse of the methodologies can lead to false inferences. In addition, more recent papers by Binder (1998) and MacKinlay (1997) both introduce various event study methodologies and their possible pitfalls.

3. Data

The data collection task required a specification for shareholders' nomination board since there are various alternatives how Finnish listed companies have been organizing the preparation of the nomination process of board of directors. The definition of shareholders' nomination board in this thesis requires that there is a pre-defined specific holdings revision date, on which the share ownership of the largest shareholders are evaluated, and based on that the largest shareholders have right to nominate a person to the shareholders' nomination board. Additionally, the Chairman of the board of directors or/and a nominee of board of directors can

be an advisory member of the shareholders' nomination board, on top of the nominees nominated by the largest shareholders.

In the data collection process I went through all the listed companies of the OMX Helsinki and figured out whether they have or have had a shareholders' nomination board in place. There are overall 58 companies listed in the Helsinki stock exchange that report having a shareholders' nomination board or similar "other arrangement", where the majority owners are heard before the board nominations. Out of these 58 companies, 15 have organized their board of director nomination process using these "other arrangement". An example of such a company is Orion Oyj, which has implemented a shareholders' nomination committee that has a totally different structure than the rest of the companies[2]. Table 1 lists the companies that use "other arrangement" in their board of director nomination process, as well as shortly describes each arrangement. These companies are excluded from the empirical evaluation of this study mainly since they do not have pre-defined holdings revision dates in place, which was a feature of the shareholders' nomination boards' definition stated afore.

Table 1. Companies with other arrangements for the board of directors nomination

Company	Description of the board of directors' nomination process
eQ OYJ	The largest shareholders of eQ Oyj, which represent more than half of the total votes, make a proposition of the board of directors candidates to the annual general meeting.
HKSCAN OYJ	The existing board of directors chooses three members to the nomination committee of HK Scan Oyj, which can be also chosen outside the board of directors. The CEO or other executive director cannot be a member of the nomination committee.
IXONOS OYJ	Ixonos Oyj does not have nomination committee due to the concentrated ownership of the firm. The largest shareholder Tremoko Oy chooses the board of directors.
MARIMEKKO OYJ	The annual general meeting chooses the board of directors. The proposal of board of directors is prepared by significant shareholders.
MARTELA OYJ	Shareholders who represent together more than 50% of the votes, present their proposition of the board of directors to the annual general meeting.
OLVI OYJ	The proposal related to the board of directors is presented to the company by its significant shareholders.
ORIOLA-KD OYJ	The nomination committee of Oriola-KD Oyj prepares the proposal of the board of directors. The members of the nomination committee are chosen by the existing board of directors, and they can be outside the board. Before the committee members are chosen the largest 20 shareholders are gathered and their candidates for the nomination committee members are discussed.
ORION OYJ	Similar nomination committee as in Oriola-KD Oyj.
PANOSTAJA OYJ	The practice have been that the proposals of the board of directors are prepared by the shareholders who represent over 10% of the total votes. The Chairman of the board of directors helps in the preparation process, if needed.

[2] For example, the shareholders' nomination board of Orion Oyj does not have a holdings revision date since it only meets when necessary (Charter of the Nomination Committee, Orion Oyj 29th October 2015)

QPR SOFTWARE OYJ	Significant shareholders prepare their proposition of board of directors. The Chairman of the board of directors gathers at least the three largest shareholders into the preparation process.
RAISIO OYJ	Raisio Oyj has a nomination working group under the board of supervisors.
SAGA FURS OYJ	Nomination committee consist of the representatives of the board of directors and the most important shareholders, who all are fur producers and thus have a client-relationship to the firm.
SANOMA OYJ	Sanoma Oyj has not found nomintion committee. Instead, the largest shareholder or a group of largest shareholders can propose new members to the board of directors.
TAKOMA OYJ	Usually the proposition of the board of directors is made by the shareholders who represent over 10% of the company votes.
WÄRTSILÄ OYJ ABP	Nomination committee prepares the board of directors member proposal to the annual general meeting. If needed, also the largest shareholders are contacted and their candidates considered. The invitiation to the annual general meeting includes the board of directors proposition. In addition, the propositions of the shareholders who control over 10% of the votes are included into the invitation, if delivered on time.

Among the 43 companies that has implemented a shareholders' nomination board as that fulfils the definition, four companies: Nordea Bank AB, Sotkamo Silver AB, SSAB AB and Telia Company AB are following the Swedish corporate governance code. These companies are also restricted from the study, to avoid any differences between Swedish and Finnish corporate governance codes to distort the results.

Additionally, Okmetic Oyj and Vacon Oyj were acquired before their initial revision dates were due, and hence are extracted from the study. In the case of Atria Oyj, all the shareholders that own KII-series shares have a right to nominate one person to the nomination board, and in addition the largest owner of A-series shares who does not own KII-series shares is granted the right to nominate one person to the board. The roots of Atria's board of director's nomination practice is based on the company's historical structure as a co-operative. Only those parties that used to be members of the co-operative are holding KII-shares, which enables the company to focus the decision power to the hands of the antecedent co-operative members. Even though, Atria Oyj's board of directors' nomination process fulfils the definition of shareholder's nomination board, the company is still excluded from the empirical study of this thesis due to its clear distinction to other shareholders' nomination board selection criteria.

After finding out which companies in Helsinki stock exchange have shareholders' nomination board in place, the next step was to dig the holdings revision dates for each company separately. The dates for the holdings revision are required to be disclosed by the companies, which made the data collection a lot easier process. These dates were easily found from company announcements, financial and corporate governance reports except for few exceptions. For

Kemira Oyj the first two years' (2004 and 2005) revision dates were unavailable, which was also the case for Uponor Oyj in 2008. The holdings revision dates and the year the shareholders' nomination board was founded are presented in Table 2.

Table 2. Founding year of the shareholders' nomination board and the number of holdings revision dates

	Company	Founding year	Number of holdings revision dates
1	AFFECTO OYJ	2015	2
2	AHLSTROM OYJ	2013	4
3	AKTIA PANKKI OYJ	2010	7
4	ALMA MEDIA OYJ	2015	2
5	ASIAKASTIETO GROUP OYJ	2015	2
6	ASPO OYJ	2016	1
7	ATRIA OYJ	2012	5
8	BASWARE OYJ	2016	1
9	COMPONENTA OYJ	2014	3
10	CRAMO OYJ	2015	2
11	DNA OYJ	2015	2
12	ELISA OYJ	2013	5
13	EXEL COMPOSITES OYJ	2005	12
14	FINNAIR OYJ	2008	9
15	FORTUM OYJ	2004	13
16	GLASTON OYJ	2013	4
17	KEMIRA OYJ	2004	11
18	KESLA OYJ	2015	2
19	METSO OYJ	2004	13
20	MUNKSJÖ OYJ	2013	4
21	NESTE OYJ	2005	12
22	OUTOKUMPU OYJ	2005	12
23	OUTOTEC OYJ	2012	5
24	PKC GROUP OYJ	2016	1
25	SPONDA OYJ	2004	13
26	STOCKMANN OYJ ABP	2015	2
27	STORA ENSO OYJ	2005	12
28	SUOMEN HOIVATILAT OYJ	2016	1
29	SUOMINEN OYJ	2011	6
30	TALVIVAARAN KAIVOSOSAKEYHTIÖ OYJ	2013	4
31	TECHNOPOLIS OYJ	2013	6
32	TIETO OYJ	2010	7
33	TIKKURILA OYJ	2010	7
34	UPONOR OYJ	2008	8
35	VALMET OYJ	2014	3
36	YIT OYJ	2016	1
37	ÅLANDSBANKEN ABP	2013	4
		Total	208

Besides finding the revision dates for each company, I needed also to collect the structure of those nomination boards (for year 2016 see Table 3) and their nominees. Utilizing the same sources that I used for the revision date collection I was able to find out the nominators and

nominees for each company, excluding Aktia Pankki Oyj in 2012 and 2013, and Exel Composites Oyj in 2007 and 2009.

Table 3. Structure of the shareholders' nomination boards at the end of 2016

The structure of the nomination board states the number of largest shareholders that have the nomination right

	Company	**Structure of the nomination board** (2016)
1	AFFECTO OYJ	3 shareholders + CoB (if not representing shareholders)
2	AHLSTROM OYJ	3 shareholders + CoB + Nominee of BoD
3	AKTIA PANKKI OYJ	3 shareholders + CoBS
4	ALMA MEDIA OYJ	4 shareholders + CoB
5	ASIAKASTIETO GROUP OYJ	3 shareholders + CoB + Nominee of BoD
6	ASPO OYJ	4 shareholders + CoB
7	ATRIA OYJ	All KI-shareholders + Largest A-shareholder + CoB
8	BASWARE OYJ	3 shareholders + CoB
9	COMPONENTA OYJ	3 shareholders + CoB
10	CRAMO OYJ	3 shareholders + CoB
11	DNA OYJ	3 shareholders
12	ELISA OYJ	4 shareholders + CoB
13	EXEL COMPOSITES OYJ	4 shareholders + CoB
14	FINNAIR OYJ	3 shareholders + CoB
15	FORTUM OYJ	3 shareholders + CoB
16	GLASTON OYJ	4 shareholders + CoB
17	KEMIRA OYJ	4 shareholders + CoB
18	KESLA OYJ	2 shareholders + Nominee of nominees
19	METSO OYJ	4 shareholders + CoB
20	MUNKSJÖ OYJ	3 shareholders + CoB + Nominee of BoD
21	NESTE OYJ	3 shareholders + CoB
22	OUTOKUMPU OYJ	4 shareholders + CoB
23	OUTOTEC OYJ	3 shareholders + CoB
24	PKC GROUP OYJ	3 shareholders + CoB
25	SPONDA OYJ	3 shareholders + CoB
26	STOCKMANN OYJ ABP	4 shareholders + CoB
27	STORA ENSO OYJ	2 shareholders + CoB + Vice CoB
28	SUOMEN HOIVATILAT OYJ	3 shareholders + CoB
29	SUOMINEN OYJ	3 shareholders + CoB
30	TALVIVAARAN KAIVOSOSAKEYHTIÖ OYJ	4 shareholders + CoB + Nominee of BoD
31	TECHNOPOLIS OYJ	3 shareholders + CoB
32	TIETO OYJ	4 shareholders + CoB
33	TIKKURILA OYJ	3 shareholders + CoB
34	UPONOR OYJ	3 shareholders + CoB
35	VALMET OYJ	4 shareholders + CoB
36	YIT OYJ	3 shareholders + (CoB if invited)
37	ÅLANDSBANKEN ABP	3 shareholders + CoB

BoD = the board of directors
CoB = Chairman of the board of directors
CoBS = Chairman of the board of supervisors

The daily share price data was extracted from Nasdaq Helsinki. For all the other holdings revision dates, the share price data was available except for DNA Oyj in 2015 and 2016, as well

as Munksjö Oyj in 2013 because those companies were not publicly listed at that time. Additionally, the trade of Talvivaara Oyj shares have been halted since the November 6 2014, which obviously makes the examination after the 2014 impossible. Other exclusions of some company-years have been done in the empirical study section if the share price data have not been sufficient for execution of certain estimation and event period lengths. As the source for OMX Helsinki index prices the Nasdaq Helsinki database was utilized. OMX Helsinki index (OMXHPI), including all the companies that are on the main list that, is used as the market return. These companies need to comply with the Finnish Corporate Governance code.

Finally, the structure of board of directors and the member tenure was collected for each company that fulfilled the shareholders' nomination board definition. The data was extracted from the annual reports and corporate governance reports, and is used in the analyzing how changes in nominators affect the director turnover. In addition, the data was enriched with CEO changes from company annual reports as well as earnings before interest and taxes, average total assets, and stock return. The performance measures were obtained from Orbis database and company annual reports, while stock returns were calculated using same daily return data as above.

4. Shareholders' nomination boards

The purpose of shareholders' nomination board is to provide an alternative to the preparation of proposal for the composition of the board of directors. In the past more common way to prepare the proposal for the next board of directors, has been by the existing board of directors or by a committee consisting of the members of board of directors. Additionally, some firms have used other not as organized and transparent ways to prepare the candidates for the subsequent board of directors.

In Finland, the first shareholders' nomination boards were introduced in 2004 by four government owned companies Fortum Oyj, Kemira Oyj, Metso Oyj, and Sponda Oyj. During the next year four other companies implemented the shareholders' nomination board as well, among these companies Neste Oyj, Outokumpu Oyj, and Stora Enso Oyj were government owned, while Exel Composites Oyj was the first non-government owned company to use the shareholders' nomination board. The largest shareholder of Exel Composites Oyj back in 2005 was Nordstjernan AB, a Swedish investment company, which exposure to the Swedish corporate governance model probably influenced the implementation of the shareholders' nomination board. After 2005, out of the listed companies only Finnair Oyj and Uponor Oyj

adopted the shareholders' nomination board before the end of decade. The next wave of shareholders' nomination board implementations took place after the change in the Finnish Corporate Governance Code in 2010, when the option of nomination board consisting of shareholders or their representatives was introduced (Finnish Securities Market Association, 2010). During the following four years, 13 companies began to use shareholders' nomination board, of which seven companies were non-government owned. Although the Finnish Corporate Governance Code is not strict but based on "comply or explain" principle, evidently the inclusion of shareholders' nomination board as an alternative had huge impact on their implementation, especially among non-government owned companies. Proofed again after the most recent change in the Finnish Corporate Governance Code in 2015, already 12 new companies have implemented the shareholders' nomination board. The recent change introduced the shareholders' nomination board first time as an equal alternative to the nomination committee rather than being a sub-category of it. Also, the disclosure of the preparation process of board member candidates was streamlined for all the methods. Another noteworthy point is that none of the companies that have implemented shareholders' nomination board has not changed back to their former corporate governance model.

4.1. Change in the Finnish Corporate Governance Code 2015

Electing the board of directors is one of the most important decisions made in the annual general meetings. Since there are multiple ways of how companies can arrange the preparation process of the candidates for the next board, a clear and transparent procedure is emphasized by the authorities. Hence, a new recommendation about "the Preparation of the Proposal for the Composition of the Board of Directors" was introduced in the latest Finnish Corporate Governance Code 2015.

The previous Finnish Corporate Governance Code from 2010 did not require companies to disclose the procedure that they applied in the preparation of the candidates for the next board of directors, unless the nomination board consisted of shareholders or representatives of shareholders (Finnish Securities Market Association, 2010). Instead, the latest version of the Finnish Corporate Governance Code includes Recommendation 7: "The company shall disclose the procedure applied in the preparation process of the proposal for the composition of the board of directors" (Finnish Securities Market Association, 2015), which unifies the disclosure practice despite of the method of board members' preparation.

The second significant change to the Finnish Corporate Governance Code was the introduction of shareholders' nomination board as an alternative to the nomination committee. The new Recommendation 18b by Finnish Securities Market Association (2015) states that:

> *The company's general meeting may establish a shareholders' nomination board to prepare matters pertaining to the appointment and remuneration of the board of directors. The shareholders' nomination board shall consist of the company's largest shareholders or persons appointed by the largest shareholders. The shareholders' nomination board may also include members of the board of directors.*

Authorities emphasize the following of good corporate governance practices in the process for establishing the shareholders' nomination board (ibid). The Finnish Corporate Governance Code requires reporting of the procedure and the cut-off date for determining the largest shareholders (holdings revision date), the procedure of appointing the members to the shareholders' nomination board, as well as the members of nomination board and whose nominees they are (ibid). In addition, the term of office of the members and the information about the length of existence of the shareholders' nomination board can be voluntarily reported. Similarly, to the nomination committees consisted of members of board of directors, the proposal for the candidates of the next board of directors has to be disclosed by the shareholders' nomination board no later than in the notice of annual general meeting.

The introduction of shareholders' nomination board as an equal method of preparing the board of directors to the more traditional nomination committee, in the latest Finnish Corporate Governance Code has had a huge impact on the implementation of shareholders' nomination boards. During the past few years, first time also smaller companies have been adopting the corporate governance method.

4.2. Descriptive evaluation of shareholders' nomination boards

At the end of the year 2016, overall 41 companies listed on OMX Helsinki had adopted shareholders' nomination board. Out of these companies, four followed the Swedish Corporate Governance Code and were thus excluded from the evaluation. The rest 37 companies came from various industries, were different in their size, and included both government and non-government owned companies (see Table 4). The ownership seems to be concentrated to the largest shareholders, as the average ownership of the three largest shareholders is 36.7% of all the votes, among the sample companies. Additionally, in around a fifth of the companies the three largest shareholders have the controlling share of total votes.

In 2016, most shareholders' nomination boards include the nominees of the three or four largest owners, in terms of the total votes, and the Chairman of the board of directors, while some companies introduce an additional member of board of directors. The construction company YIT Oyj lets the nominees of the shareholders' nomination board to decide whether they invite the Chairman of the board of directors to the nomination board. DNA Oyj is the sole company that do not include the Chairman of the board of directors in the shareholders' nomination board. Aktia Pankki Oyj does not have the Chairman of the board of directors in their shareholders' nomination board but rather includes the Chairman of the board of supervisors instead. Two companies, Kesla Oyj and Stora Enso Oyj, rely the responsibility of nominating the shareholders' nomination board nominees to the two largest shareholders. In both of these companies there are dual share class in use (Kesla Oyj has unlisted voting shares), and the two largest owners have together the majority control of votes. In Kesla Oyj's case, the two nominees of the two largest shareholders choose an additional member to the shareholders' nomination board, while Stora Enso Oyj adds the Vice Chairman of the board of directors to the nomination board.

During the past 10 years, there has been some changes in the shareholders' nomination board structures. Especially, the government owned companies have been seeking the shape of their nomination boards. In 2009, four government owned companies, Finnair Oyj, Fortum Oyj, Metso Oyj, and Neste Oyj, included the Vice Chairman of the board of directors as an advisory member to their shareholders' nomination boards. This experiment was not a success and the next year, all the companies reversed the change. A successful change was made by another government owned company, Kemira Oyj, when it included the nominee of the fourth largest owner to the shareholders' nomination board, back in 2009. Even until today, the shareholders' nomination board of Kemira has remained in the same form. An example of a contrary action is Tikkurila Oyj whose annual general meeting decided to exclude the nominee of the fourth largest shareholder after the Finnish government (Solidium Oy) sold its stake in the company, in 2011. The most active firm to change its shareholders' nomination board structure is the mining and stainless steel producer group, Outokumpu Oyj. First in 2009, the annual general meeting decided to change the fourth largest shareholder's nomination right to a nominee of the board of directors who was then excluded from the nomination board the year after. The company continued with the three largest shareholders' nominees and the Chairman of the board of directors in the shareholders' nomination board until 2012, when the nomination right was reintroduced to the fourth largest shareholder. During the year 2012, Outotec Oyj, the spin-

Table 4. Company characteristics and ownership concentration for firms with shareholders' nomination board

	Company	Industry	Market Cap (mEUR)	Total Assets (mEUR)	Government owned (2016)	Ownership concentration (largest 3 owners/all votes)
1	AFFECTO OYJ	Other software publishing	65	117		22.5 %
2	AHLSTROM OYJ	Manufacture of paper and paperboard	636	828		27.2 %
3	AKTIA PANKKI OYJ	Other monetary intermediation	419	9,486		36.6 %
4	ALMA MEDIA OYJ	Printing of newspapers	421	327		56.4 %
5	ASIAKASTIETO GROUP OYJ	Other professional, scientific and technical activities nec	264	157		40.5 %
6	ASPO OYJ	Wholesale of chemical products	268	310		19.2 %
7	ATRIA OYJ	Processing and preserving of meat	214	909		61.3 %
8	BASWARE OYJ	Other software publishing	511	227		22.2 %
9	COMPONENTA OYJ	Casting of steel	29	402		31.4 %
10	CRAMO OYJ	Manufacture of machinery for mining, quarrying and construction	1,036	1,156		10.7 %
11	DNA OYJ	Other telecommunications activities	1,520	1,259		64.1 %
12	ELISA OYJ	Other telecommunications activities	5,318	2,533	X	15.4 %
13	EXEL COMPOSITES OYJ	Manufacture of sports goods	60	53		39.9 %
14	FINNAIR OYJ	Passenger air transport	621	2,529	X	63.3 %
15	FORTUM OYJ	Production of electricity	11,824	21,964	X	52.5 %
16	GLASTON OYJ	Manufacture of hollow glass	76	101		41.3 %
17	KEMIRA OYJ	Manufacture of other chemical products nec	1,828	2,621	X	40.1 %
18	KESLA OYJ	Manufacture of machinery for mining, quarrying and construction	12	33		68.9 %
19	METSO OYJ	Manufacture of machinery for paper and paperboard production	4,913	3,236	X	31.6 %
20	MUNKSJÖ OYJ	Manufacture of machinery for paper and paperboard production	872	1,187		27.4 %
21	NESTE OYJ	Manufacture of refined petroleum products	9,254	7,443	X	53.1 %
22	OUTOKUMPU OYJ	Manufacture of basic iron and steel and of ferro-alloys	3,637	5,990	X	28.3 %
23	OUTOTEC OYJ	Manufacture of machinery for mining, quarrying and construction	1,254	1,427	X	28.0 %
24	PKC GROUP OYJ	Manufacture of electronic components	569	564		21.7 %
25	SPONDA OYJ	Activities of other membership organisations	1,381	3,917		46.7 %
26	STOCKMANN OYJ ABP	Other retail sale in non-specialised stores	330	2,241		39.1 %
27	STORA ENSO OYJ	Manufacture of paper and paperboard	6,911	12,326	X	62.5 %
28	SUOMEN HOIVATILAT OYJ	Renting and operating of own or leased real estate	157	160		24.1 %
29	SUOMINEN OYJ	Manufacture of non-wovens and articles made from non-wovens, except apparel	253	316		45.5 %
30	TALVIVAARA OYJ	Mining of other non-ferrous metal ores	127	4	X	14.5 %
31	TECHNOPOLIS OYJ	Other professional, scientific and technical activities	491	1,825		37.0 %
32	TIETO OYJ	Other software publishing	2,085	1,075	X	27.2 %
33	TIKKURILA OYJ	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	816	410		28.8 %
34	UPONOR OYJ	Manufacture of builders' ware of plastic	1,278	768		45.4 %
35	VALMET OYJ	Manufacture of machinery for paper and paperboard production	2,539	2,958	X	17.1 %
36	YIT OYJ	Construction of residential and non-residential buildings	934	2,284		17.0 %
37	ÅLANDSBANKEN ABP	Other monetary intermediation	122	5,137		49.3 %

off subsidiary of Outokumpu Oyj implemented shareholders' nomination board that included the nominees of the three largest owners plus the Chairman and Vice Chairman of the board of directors. Also Outotec Oyj followed the former parent company's example by removing the Vice Chairman of the board of directors from the nomination board in 2013.

Besides the structure of shareholders' nomination boards, different companies have distinct ways to act when a change occurs in the largest owners of the firm during the shareholders' nomination terms. For instance, Talvivaara Oyj's fourth largest shareholder Keskinäinen työeläkevakuutusyhtiö Varma had already nominated Mikko Koivusalo to the shareholders' nomination board in 2013, before selling all of its holdings. After the ownership of Varma was not among the largest ten shareholders, Mikko Koivusalo resigned from the nomination board that decided not to name anyone to replace Koivusalo in the board. In a similar manner, Martin Oliw resigned from the shareholders' nomination board of Valmet Oyj, after Cevian Capital Partners Ltd. sold its stake in the company during 2015, and no one was nominated to replace him. Two other companies, Finnair Oyj and Suominen Oyj, fulfilled the places of resigned members in their shareholders' nomination board. In both cases, the largest shareholder who did not qualify to the nomination board on the previous holdings revision date nominated the new member.

Another interesting aspect related to the shareholders' nomination boards is that sometimes the largest shareholders do not use their nomination rights, which is then passed on to the next largest shareholder on the line. According to Carlsson (2007), some foreign institutional investors have chosen to stay off the nomination boards in Sweden. There are three occasions when this has happened also in Finland. First in 2006, Odin Norden did not use its nomination right for Metso Oyj, and then in 2015 and 2016 Lombard International Assurance S.A. did not appoint a member to shareholders' nomination board of Affecto Oyj. These are not though the only times when some eligible party did not use its nomination right. Mandatum Henkivakuutusosakeyhtiö has used only once (in 2015 for Asiakastieto Oyj) the privilege to nominate, and passed the opportunity other five times (in 2008 and 2009 for Uponor Oyj, in 2012 for Atria Oyj, and in 2016 for Asiakastieto Oyj). Additionally, Keskinäinen työeläkevakuutusyhtiö Varma did not use its nomination right in 2012 for Atria Oyj, Ahlström Oyj passed on the nomination right for Munksjö Oyj in 2014, and Nokian Eläkesäätiö as well as Valtion Eläkerahasto did not appoint for Sponda Oyj in 2004 and 2006, respectively.

It is difficult to speculate why some organizations do not want to use their nomination rights. Possible explanations might be that foreign investors experience the nomination right more as a burden rather than a benefit, and leave therefore their right unused. For Nokian Eläkesäätiö ("The pension foundation of Nokia") it may have been easier to pass on the nomination right if there was no fulltime investment manager to make decisions. The case of the life insurance company, Mandatum Henkivakuutusosakeyhtiö is a bit confusing since the company invests in many Finnish companies but still do not want to actively influence the management by appointing the shareholders' nomination board members. Compared to other Finnish pension funds and investment companies, Mandatum has chosen very passive strategy in their investment management through nominations. The decision of Valtion Eläkerahasto ("Finnish government pension fund") to pass on the nomination right for Sponda Oyj in 2006 is also somewhat puzzling since they used their nomination right for the same firm the year before as well as a year after. Ahlström Oyj is the only listed company that has not used its nomination right in a given year. Although, the nomination right was not used for Munksjö Oyj in 2014 Ahlström Oyj has appointed members to the shareholders' nomination board of Suominen Oyj between 2011 and 2013.

The holdings revision dates vary from company to company. For some companies the first or last weekday of a predefined month is the holdings revision date, while others use a fixed date from year to year. In addition, 15 companies have changed the holdings revision date from one

Table 5. Changes in holdings revision dates

The initial holdings revision date and new dates. If the date is written using numbers, it means a fixed date from year to year, while if it is written in letters the holdings are revised in the given weekday of that month.

Company	**Initial Date**	**New Date**										
		2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
EXEL COMPOSITES OYJ	15.11.		Nov. 1st							Oct. 1st		
FINNAIR OYJ	Nov. 1st								Sep. 1st			
FORTUM OYJ	1.12.	Nov. 1st							Sep. 1st			
KEMIRA OYJ	Nov. 1st			17.12.	31.5.		31.8.					
KESLA OYJ	16.2.											Feb. 28th
METSO OYJ	1.12.	Nov. 1st					1.10.		Aug. 31st	Sep. 1st		
NESTE OYJ	1.12.	Nov. 1st							Sep. 1st			
OUTOKUMPU OYJ	1.12.	Nov. 1st					1.10.					
SPONDA OYJ	1.12.	Nov. 1st					1.10.		30.9.			
STORA ENSO OYJ	1.10.					30.9.						31.8.
SUOMINEN OYJ	17.11.							15.11.	1.9.			
TECHNOPOLIS OYJ	1.10.								1.9.			
TIETO OYJ	30.9.							31.8.				
TIKKURILA OYJ	31.8.							31.5.				
UPONOR OYJ	31.7.						31.8.					

year to another, (all the changes are available in the Table 5).

Again, the government owned companies have been busier in changing the holdings revision date than their non-government owned counterparts. Metso Oyj has managed to change the holdings revision date for four times, while Kemira Oyj and Sponda Oyj have made three changes each. A clear pattern is that in 2006 all government owned companies at that time changed simultaneously their holdings revision date for the first weekday of November.

The nomination rights are very concentrated in Finland among the three largest nominators. These are two pension funds, Keskinäinen Eläkevakuutusyhtiö Ilmarinen and Keskinäinen Työeläkevakuutusyhtiö Varma, and the Finnish Government that consists of Solidium Oy, Valtioneuvoston kanslia and Kauppa- ja Teollisuusministeriö. Presented on the Table 6, the three largest nominators have named around 350 nominees to the shareholders' nomination boards, which is more than half of the all nominees (around 680) named in total. Among the largest ten nominators of all time, there are four pension funds, three private investment groups and the investment funds of Nordea Bank and OP Group in addition to the Finnish Government.

Table 6. Nominators with more than 5 nominees in total

Company / Organization	**Nominees**
Keskinäinen Eläkevakuutusyhtiö Ilmarinen	120
Finnish Government (Solidium Oy, VNK, Kauppa- Teollisuusministeriö)	117
Keskinäinen Työeläkevakuutusyhtiö Varma	115
Oras Invest Oy	26
Kansaneläkelaitos	25
Cevian Capital AB	20
OP-Rahastoyhtiö	13
Nordea Funds Oy	12
AC Invest & Ahlström Oyj	11
Kuntien eläkevakuutus	9
Nordstjernan AB	9
Foundation Asset Management	8
Keskinäinen Eläkevakuutusyhtiö Etera	7
Eläkevakuutusosakeyhtiö Veritas	6
Oulun kaupunki	6
Skagen Global Verdipapirfond	6
Itikka Osuuskunta	5
Lihakunta	5
Pohjanmaan Liha	5
Stiftelsen Tre Smeder	5
Veikko Laine Oy	5
Ålandia Vakuutus	5
Total	540

In some occasions, a group of shareholders has established an alliance to reach the amount of shares required to the nomination right. In Ahlström Oyj this kind of practice has been used since 2014, when Vimpu Intessentar Ab and Belgrano Investments Oy formed an alliance to nominate Alexander Ehrnrooth into the shareholders' nomination board. On the same year, five individual investors plus Ahlström Capital Oy also put their votes together to nominate Thomas Ahlström into the nomination board. These two coalitions have remained since and nominated every year the same persons into the nomination boards. Similar arrangement by the Ahlstöm family, Ahlstöm Capital Oy and a group of individual investors have been in use also in Munksjö Oyj since its spin-off from Ahlström Oyj in 2013.

4.3. Changes in nomination boards and their relation to directors' turnover

Before studying whether abnormal returns exist around holdings revision dates the relation between changes in shareholders' nomination board, especially in the nominators, and the board of directors' turnover should be evaluated. The seat in the shareholders' nomination board gives the permission and responsibility to prepare the next board candidates, of which the annual general meeting then votes and elects the subsequent board of directors. Therefore, a change in the nominators of shareholders' nomination board should lead to more changes in the board of directors in the following annual general meeting assuming that the new nominators are trying to affect the management of that company.

To study the effect of changes in shareholders' nomination board to the directors' turnover, a regression analysis is performed. Because the response variable in the analysis is not continuous but rather a count variable (the number of changes in the board of directors), ordinary least squares (OLS) would be inconsistent and biased as noted by Hermalin and Weisbach (1988). The solution is to use a Poisson loglinear model introduced by Hausman, Hall and Griliches (1984). The methodology is similar to the study by Hermalin and Weisbach (1988), except that instead figuring out how inside and outside directors tend to be nominated; the focus of this study is solely on the relationship between changes in nominators and the subsequent directors.

Poisson loglinear model consists of three components (Agresti (2007)):

1. Random component: the response variable has a Poisson distribution that is $y_i \sim Poisson(u_i)$ for $i = 1, \dots, N$ where the expected count of y_i is $E(Y) = \mu$.
2. Systematic component: Specifies the set of explanatory variables.

3. Link function: Specifies a function that relates μ to the linear predictor i.e. connects the random and systematic components. In the Poisson loglinear model, the link function permits μ to be nonlinearly related to the predictors, by modeling the log of the mean. As long as μ cannot be negative (as is the case with count data), the log link function is appropriate.

With these three components, a Poisson loglinear model has form:

$$\log(\mu) = \alpha + \beta_1 x_1 + \cdots + \beta_k x_k$$

Since the Poisson distribution has a positive mean, it is possible to model the log of the mean, which can have any real-number value. The mean of the model satisfies the exponential relationship:

$$\mu = \exp(\alpha + \beta x) = \mathrm{e}^{\alpha}\left(\mathrm{e}^{\beta_1}\right)^{x_1} \ldots \left(\mathrm{e}^{\beta_k}\right)^{x_k}$$

Therefore, the interpretation of the parameter estimates are following:

- $\exp(\alpha) =$ effect of the mean of response variable, μ, when $X = 0$
- $\exp(\beta_k) =$ with every unit increase in x_k, the predictor variable has multiplicative effect of $\exp(\beta_k)$ on the mean of response variable (μ)

Instead of minimizing the sum of the squares, as OLS does, the Poisson loglinear model finds model parameter estimates using a numerical algorithm (ibid), such as Fisher scoring algorithm, Newton-Raphson algorithm, etc. In general, a closed-form solution does not exist so the maximum likelihood estimates calculated through the above-mentioned iterative algorithms. Agresti (2007) and Fisher (1925) provide a more detailed explanation about the methodology.

When conducting a Poisson regression a thing to bear in mind is that by a definition, a random variable has the same mean and variance. Sometimes the data vary more than is assumed if the response distribution would truly be Poisson. When the random component of the Poisson regression has larger variance than mean we are facing a complication called overdispersion. Fortunately, overdispersion can be easily solved by using a different distribution called negative binomial, which has a form:

$$E(Y) = \mu, \qquad \mathrm{Var}(Y) = \mu + D\mu^2$$

Negative binomial distribution has a nonnegative dispersion parameter D that adjust for the overdispersion as stated by Agresti (2007). In fact, negative binomial distribution converges to the Poisson distribution when $D \to 0$ i.e. when overdispersion is not present.

Overall, there are 145 firm-years in the sample between 2005 and 2016. As mentioned earlier, the response variable in the Poisson loglinear model is the count of changes in board of directors at time t_0, which are either additions or departures. Similar to the Hermalin and Weisbach (1988), there are no "adding-up constraints" in the data since the additions and departures from board are joint-equations. Although, there are in total 177 additions and 176 departures in the sample, the correlation between the additions and departures is only 0.786. This is an indication that the board size is not fixed as noted also by Hermalin and Weisbach (ibid). On an average firm-year there was 2.35 changes in the board of directors, while the most changes in one firm-year was 11. Additionally, on some firm-years there was no changes in the board of directors. The explanatory variable of interest is the changes in the nominators of shareholders' nominator board at time t_{-1}. The mean changes in the nominators was 0.37 and the maximum amount of changes in a given year was 3.

Other explanatory variables were chosen following the previous literature, especially Hermalin and Weisbach (1988) and Viskari (2014). The controlling explanatory variables include the size of the board of directors at t_0 as well as the amount how much the size of the board of directors changed from the previous year. Intuitively, the larger the boards are – the more likely there is going to be changes in them. Moreover, by definition if there is a change in the size of the board – there must be at least one change in the directors. The effect of firm performance to director turnover is evaluated by the change in EBIT in the previous year as well as two years before the board of directors election. Similarly, the previous return on the company stock is included as two explanatory variables[3]. The effect of CEO change and directors closing to retirement were included in the model with two dummy variables. In addition, the board of directors median tenure is controlled by another explanatory variable, firm size (average total assets) and dummy variable indicating whether the nomination board was founded at year t_0, are included in the model. Finally, year dummies for three periods: 2005-2008, 2009-2012, and 2013-2016 are used to control for time trends.

[3] For companies with dual share classes the equally weighted average return was used.

Table 7. Loglinear Poisson regression estimates of changes in the board of directors

The estimates of changes in board of directors between 2005 and 2016 in companies that have implemented a shareholders' nomination board. Data about board members and the nominators of shareholders' nomination boards is hand collected from companies annual reports and corporate governance Reports for each of the 144 firm-years. Financial data is obtained from Orbis -database and companies Annual Reports. Stock return data is extracted from Nasdaq.
*(Significance levels 10-% level *, 5-% level **, and 1-% level ***)*

Independent variable	**Estimate**	**Std. Error**	**z-value**	**Pr(>|z|)**	
Intercept	-0.4607	0.4853	-0.9492	*0.3425*	
lag(changes in nominator) [a]	0.2142	0.0947	2.2632	*0.0236*	**
Board size	0.1915	0.0616	3.1063	*0.0019*	***
Board size changed by [b]	-0.1681	0.0930	-1.8075	*0.0707*	*
ΔEBIT [c]	0.0001	0.0002	0.3567	*0.7213*	
lag(ΔEBIT)	0.0000	0.0002	-0.0892	*0.9289*	
Stock return [d]	-0.1470	0.1536	-0.9568	*0.3387*	
lag(stock return)	0.0060	0.1414	0.0424	*0.9662*	
Dummy CEO change [e]	0.1221	0.1482	0.8238	*0.4101*	
Dummy over 65 years old directors	-0.0469	0.1238	-0.3793	*0.7045*	
lag(directors' median tenure)	-0.0166	0.0411	-0.4030	*0.6870*	
Size [f]	0.0000	0.0000	-0.5778	*0.5634*	
Dummy if year = 2009-2012	-0.0846	0.1858	-0.4555	*0.6488*	
Dummy if year = 2013-2016	-0.0313	0.1786	-0.1751	*0.8610*	
lag(dummy nomination board founded) [g]	0.0125	0.1790	0.0697	*0.9444*	

Residual deviance: 215.8 on 130 degrees of freedom

[a] lag(changes in nominator) is the number of changes in nominators of shareholders' nomination boards in the previous year.

[b] Board size changed by is the number of seats the board size did change compared to the previous year.

[c] ΔEBIT is the company's change in earnings before interest and taxes in the recent fiscal year.

[d] Stock return is the return on the company stock during the most recent calendar (for companies with dual share classes stock return is the equally weighted average return.

[e] Dummy CEO change is indicating whether CEO changed during the most recent calendar year.

[f] Size is the average total assets during the most recent fiscal year.

[g] lag(dummy nomination board founded) indicates whether the nomination board was founded the year before.

The loglinear Poisson regression results are shown in Table 7. Since the coefficient for the explanatory variable of interest (lag(changes in nominator)) is positive, the more changes there were in nominators in the previous year t_{-1}, the more changes there are in the board of directors in year t_0. The estimate 0.2142, with standard error of 0.0947, is statistically significant at 5-% level. Other statistically significant variables are the ones about board size. It appears so that the size of the board of directors at t_0 is positively related to the number of changes in directors at the same year. As expected and verified by the previous literature, it seems so that the larger

the board, the more there are changes in directors. Additionally, there seems to be a negative relationship between the change in the board size and the changes in the directors. The coefficient is statistically significant at 10-% level, and it seems quite odd that the relationship would be negative. Contrary to previous literature neither; CEO change, previous company performance, or the number of directors nearing retirement seem to have statistically significant relationship with the director turnover.

Overall, the model does not fit the data very well. In a loglinear Poisson regression model that fits the data satisfactory, the residual deviance should be equal to the number of degrees of freedom, which is the expected value of χ^2 distribution. This is because residual deviance follows approximately χ^2 distribution with $(n - p)$ degrees of freedom, where p states the number of unknown parameters in the model. Given the residual deviance value of 215.8 with 130 degrees of freedom, it is visible that the model lacks the fit. This might be caused by the presence of overdispersion in the model. As mentioned earlier, the cure for overdispersion is to fit a model with negative binomial distribution instead of Poisson distribution.

Otherwise, the model remains the same as with loglinear Poisson model, and only new estimates are fitted using the overdispersion robust negative binomial distribution. The coefficient for lag(changes in nominator) remains positive (see Table 8), but is not as statistically significant as in the previous model, with z-value of 0.5746. In addition, the coefficient for change in the size of board is no more statistically significant, and the odd relationship found in the loglinear Poisson model seem to have been due to overdispersion. Finally, the coefficient of size of the board of directors at t_0 is still positive and becomes statistically significant at 0.1-% level. The overall fit of the model improves as well, as the residual deviance value decreases to 167.7 that is much closer to the degrees of freedom (130).

The results of the regression analysis indicate that changes in nominators have a positive effect on the number of changes in the subsequent board of directors. Because, the more there are changes in nominators seem to increase the director turnover in the following year, the hypothesis that activist investors are using shareholders' nomination boards to their self-benefits is plausible and needs to be investigated in more detail. Additionally, the results for companies with shareholders' nomination boards seem to deviate from the previous literature. The explanation might be that the more concentrated ownership affect the director turnover, in a way that it is less dependent on the short-term performance in the past and more focused on the longer-term performance. In addition, the retirement age from the board might be different

for companies with shareholders' nomination boards, but as fruitful as an explanation that would be, it is out of the scope of this thesis.

Table 8. Negative binomial regression estimates of changes in the board of directors

The estimates of changes in board of directors between 2005 and 2016 in companies that have implemented a shareholders' nomination board. Data about board members and the nominators of shareholders' nomination boards is hand collected from companies Annual Reports and Corporate Governance Reports for each of the 144 firm-years. Financial data is obtained from Orbis -database and companies Annual Reports. Stock return data is extracted from Nasdaq.
*(Significance levels 10-% level *, 5-% level **, and 1-% level ***)*

Independent variable	**Estimate**	**Std. Error**	**z-value**	**Pr(>|z|)**	
Intercept	-1.0951	1.1646	-0.9403	*0.3470*	
lag(changes in nominator) [a]	0.5368	0.2825	1.8998	*0.0575*	*
Board size	0.5069	0.1495	3.3916	*0.0007*	***
Board size changed by [b]	-0.3660	0.2607	-1.4037	*0.1604*	
ΔEBIT [c]	0.0002	0.0006	0.2778	*0.7812*	
lag(ΔEBIT)	-0.0001	0.0006	-0.2461	*0.8056*	
Stock return [d]	-0.3002	0.3601	-0.8336	*0.4045*	
lag(stock return)	-0.0062	0.3753	-0.0165	*0.9869*	
Dummy CEO change [e]	0.5127	0.4617	1.1103	*0.2669*	
Dummy over 65 years old directors	-0.0963	0.3127	-0.3080	*0.7581*	
lag(directors' median tenure)	-0.0324	0.1008	-0.3218	*0.7476*	
Size [f]	0.0000	0.0000	-0.4083	*0.6830*	
Dummy if year = 2009-2012	-0.2808	0.4835	-0.5809	*0.5613*	
Dummy if year = 2013-2016	-0.1099	0.4870	-0.2258	*0.8214*	
lag(dummy nomination board founded) [g]	-0.0160	0.4246	-0.0377	*0.9699*	
Residual deviance: 167.7 on 130 degrees of freedom					
Theta	7.29	3.63			

[a] lag(changes in nominator) is the number of changes in nominators of shareholders' nomination boards in the previous year.

[b] Board size changed by is the number of seats the board size did change compared to the previous year.

[c] ΔEBIT is the company's change in earnings before interest and taxes in the recent fiscal year.

[d] Stock return is the return on the company stock during the most recent calendar (for companies with dual share classes stock return is the equally weighted average return.

[e] Dummy CEO change is indicating whether CEO changed during the most recent calendar year.

[f] Size is the average total assets during the most recent fiscal year.

[g] lag(dummy nomination board founded) indicates whether the nomination board was founded the year before.

5. The research question and testable hypotheses

This thesis is interested in shareholders' nomination boards and particularly in the abnormal returns before the holdings revision date. There are some evidence from Sweden that short-term activist investors acquire shares before the holdings are revised to ensure their place in the

shareholders' nomination board (Carlsson 2007). Once they have access to nominate board candidates, such a candidates will be promoted who are aligned with the interest of the activists, i.e. driving the short-term share value (possibly in an expense of the long-term value) via more leveraged capital structure or share repurchases (ibid). To succeed in their target the activist investors might need to buy very large junks of shares in a short time window just before the holdings revision date that may lead to positive abnormal returns before the event date. Since in Sweden the shareholders' nomination boards have been a common corporate governance practice and included in the Corporate Governance code since 2004, there might be some parties also in Finland trying to influence company decision-making through the shareholders' nomination boards. If this kind of activist behavior exist in Finland, changes that restrict the short-term exploitation would be recommendable to the Finnish Corporate Governance. Additionally, if there exist a pattern of abnormal returns before the holdings revision date, that pattern would be a violation against the efficient market hypothesis.

5.1. Research question

The purpose of the thesis is to evaluate whether abnormal returns exists around the holdings revision date in firms that have a shareholder's nomination board implemented. To answer that the research question is composed in the following way:

Do there exist abnormal returns around the holdings revision date in companies that have adopted a shareholders' nomination board?

5.2. Testable hypotheses

Hypotheses that the research is going to test are based on the intuition that there exist some parties that are interested in short-term exploitation of such companies that have shareholder's nomination board in place, through the nomination process as explained above. If such parties exist then their pursuit of power might drive the share price up before the holdings revision date. That kind of price increase pattern would be totally independent from the company fundamentals. According to efficient market hypothesis (EMH), developed by Eugene Fama, market prices at any given point in time should "fully reflect" available information (Fama, 1970). The implication of the EMH is that any chosen trading strategy should not be able to produce higher risk-adjusted (abnormal) returns than some other strategy. Therefore, if EMH is valid there should not exist abnormal returns around the holdings revision dates. The first testable hypothesis is then composed as following:

1. Excess positive risk-adjusted returns do not exist before the holdings revision date in companies that have adopted a shareholders' nomination board.

Testing the market efficiency is always a complicated task due to the joint hypothesis problem. Since the researcher needs to make an assumption about the expected returns, the test is always conditioned on the underlying model e.g. market model, CAPM, or the three-factor model of Fama and French (1993), as well as the test of market efficiency. Thus, if the underlying asset-pricing model is misspecified one cannot say anything about the market efficiency (Fama, 1991). On the other hand, the bad-model problem arising from the joint hypothesis testing is less serious in event studies that have a shorter return windows because expected daily returns are approximately zero and thus have only minor effect on estimates of abnormal returns (Fama, 1998). While the research approach in hand is an event study the focus on short-term returns should mitigate the bad-model problem and so produce uncontaminated results.

The rejection of the first hypothesis would require that the returns before the holdings revision date in companies that have a shareholders' nomination board would be high enough to exceed the returns predicted by the underlying model. If abnormal returns exist before the holdings revision date, it may not certainly be due to an activist competing for the nomination right. To make any inference about the causation, changes in the share ownerships needs to be evaluated too.

Beforehand it would be very easy to think occasions when abnormal returns before the holdings revision date are not related to the nomination rights competition, at all. Let's say there is a company that has a shareholders' nomination board but the largest five shareholders' holdings in the company have not changed during the past year. Then it would not make sense to claim that such a company's share price is driven up by activist competing for the board nominations. Thus, it might be better idea to consider only those holdings revision dates, when there is a change in the composition of shareholders' nomination boards. The second testable hypothesis is therefore as following:

2. Excess positive risk-adjusted returns do not exist before the holdings revision date in years, when there is a change in the composition of the shareholders' nomination board.

The second hypothesis narrows the sample a lot and in fact might omit some observations when there actually existed competition for the nomination board elections. This might happen if the competition did not after all yield a change of the shareholders' nomination board structure. However, the competition might still have been severe enough to drive the share price up, which

then might have been enough to produce abnormal returns around the holdings revision date. Thus, testing both of the hypotheses is justified.

The ownership structure of a company might have an effect on the behavior of a potential activist investor. Especially the government ownership might make activists hesitant for several reasons. Firstly, government-ownership in Finland is concentrated on several industries like aviation, oil and gas, and mining, where the government has a strategic interest that differs from the shareholder value maximization. To ensure that the strategic interest also remains in the future the government is reluctant to sell its shares, which complicates the share acquisition for an activist in the first place. Even if the activist could buy enough shares to secure a spot in the shareholders' nomination board, getting board member candidates that drive short-term shareholder value increasing propositions to the board would be a cumbersome task against the majority ownership of the government. What makes the nomination of activist's board members even harder is that most of the times the other largest shareholders are pension funds who are more likely to back up the government rather than the activist. Hence, the activists if they exist are more likely to target non-government owned companies. Therefore the third testable hypothesis is:

3. Excess positive risk-adjusted returns do not exist before the holdings revision date in those firms where the government is not an owner.

Finally, the fourth testable hypothesis is a combination of the second and third hypotheses. It might be a case that the changes in the shareholders' nomination board are not producing positive abnormal returns before the holdings revision date, for instance if there are only some companies that are targeted by the activist investors. On the other hand, probably not all non-government owned companies are attracting the activists' interest either. Thus, testing the combined the effect of changes in the nominator for non-government owned companies should be conducted, even though the sample size is going to be quite small. The fourth testable hypothesis is formed in a following way:

4. Excess positive risk-adjusted returns do not exist before the holdings revision date in firms that are non-government owned, when there is a change in the composition of the shareholders' nomination board.

By testing the above-introduced four hypotheses, the thesis evaluates the most critical potential sources of positive abnormal returns before holdings revision date, and delivers a comprehensive answer to the research question.

6. Methodology

Empirical analyses of the thesis are conducted using event study methodology. The following section first compares different event study models and their fit for the research question in hand. Then the chosen event study model is introduced and the estimation of the model is discussed in more detail. Finally, the chapter concludes how the sample abnormal returns are calculated and the test statistics are evaluated.

6.1. Comparison of different event study models

The aim of the thesis is to evaluate whether abnormal returns exist around the holdings revision dates for companies that have a shareholders' nomination board in place. To be able to assess the abnormal returns around the holdings revision dates I need to estimate the normal returns for each company for each year in the time period preceding the holdings revision dates. Therefore, I need to divide the data into the estimation windows, where the normal return estimates are calculated, and into event windows, in which the abnormal returns are measured. As Ball and Brown (1968) notes, the event window and the estimation window should not overlap or otherwise the coefficient estimates will be biased since the disturbances are not mean zero. Thus, the estimation window precedes the event window that is formed so that the holdings revision date that is the event date for each company and each year is in the middle of the event window. In addition to the abnormal returns before the event date, the interest is to find out whether there are abnormal returns right after the event date. Figure 1 describes the timeline of the estimation and event windows.

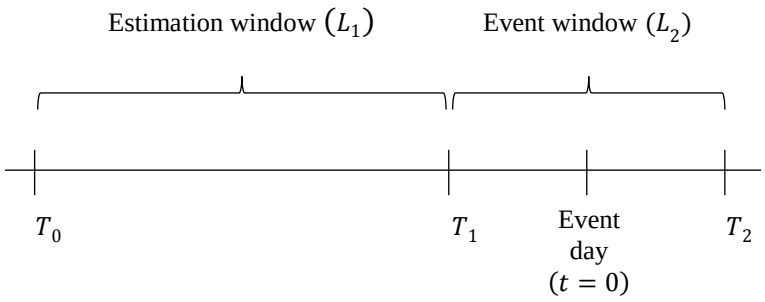

Figure 1. Timeline of the estimation and event window

The event date is defined as $t = 0$. Hence, the estimation window constitutes from $t = T_0 + 1$ to $t = T_1$, and similarly the event window is from $t = T_1 + 1$ to $t = T_2$. The length of the estimation window is $L_1 = T_1 - T_0$ and while the length of the event window is $L_2 = T_2 - T_1$.

As stated above, the variables of interest in the study are the abnormal returns during the event windows. Following the basic methodology of event studies in economics and finance described by MacKinlay (1997) the abnormal returns are calculated by subtracting the normal return of the stock during the event window from the actual ex post return of the stock in the event window. The normal returns are defined as the expected returns without conditioning on the event taking place. For company i and event date t the abnormal return is:

$$AR_{i,t} = R_{i,t} - E\left(R_{i,t}|X_t\right)$$

Where $AR_{i,t}$ is the abnormal return, $R_{i,t}$ is the actual return, and $E\left(R_{i,t}|X_t\right)$ is the normal return for time t. According to MacKinlay (1997) there are two common statistical ways to model the normal returns. The constant mean return model where the conditioning information for the normal return model X_t is a constant, and the market model where X_t is the market return. Alternatively, economic models like the Capital Asset Pricing Model (CAPM) or Arbitrage Pricing Models (APT) could be used in the abnormal returns' calculations. The CAPM is an equilibrium theory shaped by Sharpe (1964) and Lintner (1965) where the covariance with the market portfolio determines the expected return for a given asset. On the other hand, the APT as an asset pricing theory determines the expected return of an asset as a linear combination of various risk factors (Ross 1976).

The paper by Armitage (1995) compares different event study models. Between the two statistical models, market model seems to yield more powerful results especially when the event dates are same for the different shares. This is due to the fact that the variances of the abnormal returns are lower when the portion of the returns that is caused by the variation in the market return is removed. Lower variances in the abnormal returns can improve the ability to detect the event effects. Additionally, the constant mean return model seems to produce upward biased abnormal returns during a bull markets and downward biased abnormal returns during a bear market as stated by Klein and Rosenfeld (1987).

According to MacKinlay (1997), the CAPM model was used widely in event studies during the 1970s but has since almost ceased due to "deviations implying that the validity of restrictions imposed by the CAPM on the market model are questionable". Therefore, the results may be sensitive to specific CAPM restrictions, which is easily avoided by using statistical models that do not have similar restrictions. In addition, Dimson and Marsh (1986) as well as Seyhun (1986) found out that the CAPM model is much more prone to bias because of the size effect, i.e. a share with high returns has also a high regression constant.

On the other hand, in the multifactor models like APT the market factor seems to be the most important factor and other factors add relatively little explanatory power (MacKinlay (1997)). Brown and Weinstein (1985) compare four-factor model to a market model and conclude that the use of a more complicated factor model leads to only marginal improvement. MacKinlay (1997) concludes that since the main motivation of using APT model is to eliminate biases introduced by the CAPM, the simpler statistical models that are also robust to CAPM biases are mainly used for event studies.

In this study, the statistically motivated market model was chosen over the constant mean return and economic models.

6.2. Properties and estimation of the market model

The market model relates the return of any given asset to the return of the market portfolio. Hence, the model has a linear specification that follows from the assumed joint normality of asset returns, (see MacKinlay (1997)). The market model for an asset i at time t is specified as:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$$

$$E(\epsilon_{it}) = 0 \qquad \text{var}(\epsilon_{it}) = \sigma_{\epsilon_i}^2$$

Where R_{it} is the return of the asset and R_{mt} is the market portfolio return. ϵ_{it} is the zero mean noise term while α_i, β_i, and $\sigma_{\epsilon_i}^2$ are the parameters of the market model. If the general conditions hold, ordinary least squares (OLS) yields consistent estimates for the market model parameters. Furthermore, if the assumptions that asset returns are jointly multivariate normal, and independently and identically distributed through time the OLS is efficient (MacKinlay (1997)). While these assumptions are strong, MacKinlay states that (ibid) they are still empirically reasonable and inferences made from the normal return models remain often robust, even though the assumptions are not entirely fulfilled. The general evidence suggests that daily returns are not normally distributed but rather skewed and fat-tailed, (see e.g. Fama (1965), Mandelbrot (1967), and detailed discussion in Officer (1972)). Brown and Warner (1985) show that the same applies for the daily abnormal returns too. Although the individual daily returns are shown to be non-normally distributed, The Central Limit Theorem results in the sample mean abnormal daily returns to converge to normality when the sample size is increased.

There are reason to believe that the above assumptions are violated since the event windows of some of the shares are overlapping in the calendar time. As can be seen from the Figure 2, most holdings revision dates are during the autumn. This lead to the cross-sectional dependence of

the returns as well as abnormal returns, which is problematic since covariances of the different securities' abnormal returns might not be zero. According to Binder (1998), the cross-sectional dependence is just a minor problem if the securities are randomly chosen i.e. from different industries, and the market model abnormal returns are used, (detailed evaluation in the Chandra, Moriarty and Willinger (1990) paper).

Further, the time series dependence of average abnormal returns will be unimportant if the event period is relatively shorter that the estimation period. Also, Brown and Warner (1985) find that the extraction of market factor is a sufficient adjustment for dependence if the stocks are selected randomly from various industries. Finally, even if the sample securities are not independent and identically distributed drawings from infinite variance distributions there is evidence that the distribution of daily mean returns still converges to a normal (see Blattberg and Gonedes (1974), Hagerman (1978)). Since the companies that have implemented a shareholders' nomination boards come from different industries and market model is utilized, the trouble caused by cross-sectional dependences is mitigated to a great extent and no changes to test statistic calculations are required.

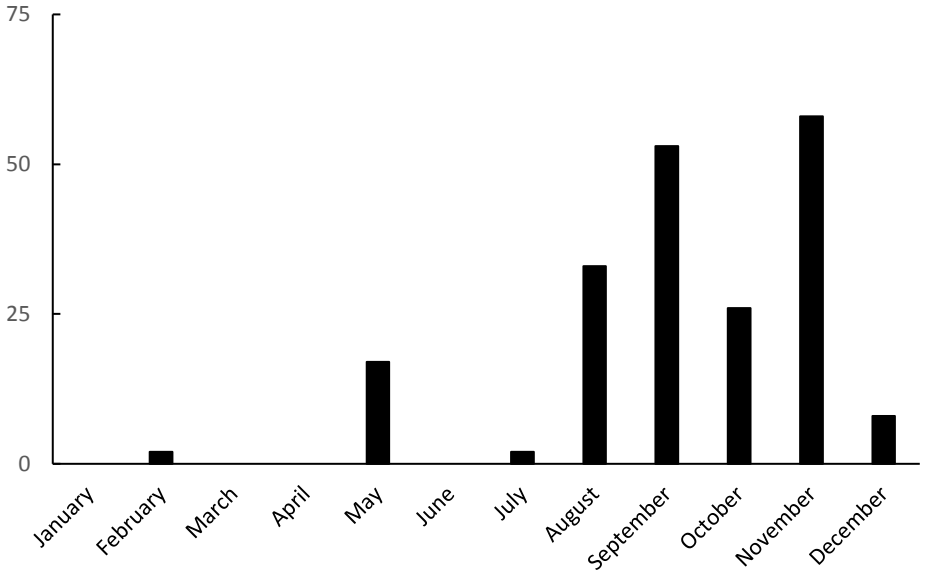

Figure 2. Holdings revision dates by month

Following the notation used in MacKinlay (1997), the OLS estimators of the market model parameters for security i are calculated from the estimation window's observations in the following way:

$$\hat{\beta} = \frac{\sum_{t=T_0+1}^{T_1}(R_{it} - \hat{\mu}_i)(R_{mt} - \hat{\mu}_m)}{\sum_{t=T_0+1}^{T_1}(R_{mt} - \hat{\mu}_m)^2}$$

$$\hat{\alpha}_i = \hat{\mu}_i - \hat{\beta}_i \hat{\mu}_m$$

$$\hat{\sigma}_{\epsilon_i}^2 = \frac{1}{L_1 - 2} \sum_{t = T_0+1}^{T_1} \left(R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}\right)^2$$

where

$$\hat{\mu}_i = \frac{1}{L_1} \sum_{t = T_0+1}^{T_1} R_{it}$$

and

$$\hat{\mu}_m = \frac{1}{L_1} \sum_{t = T_0+1}^{T_1} R_{mt}$$

R_{it} and R_{mt} are the return in estimation period t for security i and the market respectively, and L_1 is the length of the estimation window.

The abnormal return for the security i in the any given day t at the event window is:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}$$

In other words, the abnormal return is the out of sample basis calculated error term of the market model. Therefore, the abnormal returns are conditioned on the event window market returns and under the null hypothesis, will be jointly normally distributed with a zero conditional mean and conditional variance $\sigma^2(AR_{it})$, where

$$\sigma^2(AR_{it}) = \sigma_{\epsilon_i}^2 + \frac{1}{L_1}\left[1 + \frac{(R_{mt} - \hat{\mu}_m)^2}{\hat{\sigma}_m^2}\right]$$

The conditional variance consists of two parts. The first component is the variance of the error term in the estimation process, and the second part is additional variance due to the sampling error in $\hat{\alpha}_i$ and $\hat{\beta}_i$. As MacKinlay (1997) notes, the sampling error leads to serial correlation of the abnormal returns even though the true error terms are independent through time. The simple remedy for the serial correlation is to choose long enough estimation window L_1 so that it is reasonable to assume that the second part of the variance is zero. Choosing the length of the estimation window is balancing between greater precision of estimate parameters and the risk of these parameters becoming out of date, as noted by Armitage (1995). For event studies using daily data, the length of estimation window usually ranges from 100 to 300 days (Peterson

(1989)). Corrado and Zivney (1992) test the effect of different estimation window's length to the test statistics using the market model. They conclude that an estimation window as short as 89 days produces no difference in the test statistics' performance, compared to the 239 days estimation window. Since the holdings revision dates are annual events the maximum length of estimation window is 250 days minus the length of event window, to ensure that the event and estimation windows do not overlap. In practice, some companies have decided to change the timing of holdings revision date from one year to another, which shortens the maximum length of the estimation window even further. For example, Kemira Oyj had the holdings revision date in 2008 on December 17 but, for some reason, changed the revision date for the next year to the 31st of May. Thus, there was only five and a half months between these two holdings revision dates so the length of the estimation would have to be less than 100 days if I would like to use the Kemira Oyj 2009 holdings revision date in the study. The study uses 100 trading days as the length of the estimation window since it is long enough to reasonably assume that the sampling error of the conditional variance becomes zero, and does not lead to many exclusions of event dates. What comes to the length of the event window, a window of 11 and 41 trading days were used in the study. More discussion on the event and estimation window length as well as how to deal with special cases like Kemira Oyj in 2009 are included in the empirical results chapter. To conclude, the statistical properties of abnormal return for company i at time t within the event window are:

$$AR_{it} \sim N\big(0, \sigma^2(AR_{it})\big)$$

To be able to make inferences for the abnormal returns around holdings revision dates the abnormal returns needs to be aggregated through time and across the securities. Cumulative abnormal return for security i between t_1 and t_2, ($t_1 \leq t_2$, and both t_1 and t_2 are within the event window) is defined as:

$$CAR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_{it}$$

and the asymptotic variance of CAR_i is

$$\sigma_i^2(t_1, t_2) = (t_1 - t_2 + 1)\sigma_{\epsilon_i}^2.$$

According to MacKinlay (1997), the asymptotic variance of CAR_i "can be used for reasonable values of L_1" i.e. when the estimation window is long enough. The distribution of the cumulative abnormal return under H_0 (the event does not have an effect on the returns) is

$$CAR_{it} \sim N\big(0, \sigma^2(t_1, t_2)\big).$$

When the null distributions of the abnormal and the cumulative abnormal return are determined as above, the statistical tests of the null hypothesis can be done after the aggregation of abnormal and cumulative abnormal returns across securities. For event period t the sample aggregated abnormal return for N events is

$$\overline{AR}_t = \frac{1}{N}\sum_{i=1}^{N} AR_{it}$$

and the asymptotic variance is

$$\text{var}(\overline{AR}_t) = \frac{1}{N^2}\sum_{i=1}^{N} \sigma_{\epsilon_i}^2.$$

Similarly the aggregated cumulative abnormal return for any interval in the event window is

$$\overline{CAR}(t_1, t_2) = \sum_{t=t_1}^{t_2} \overline{AR}_t$$

and its variance is

$$\text{var}\big(\overline{CAR}(t_1, t_2)\big) = \sum_{t=t_1}^{t_2} \text{var}(\overline{AR}_t).$$

Although, in practice the variance of the residual term $\sigma_{\epsilon_i}^2$ is unknown a sample variance $\hat{\sigma}_{\epsilon_i}^2$ can be calculated from the estimation window, and is often used as the estimator to calculate the variance of aggregated abnormal returns (see Brown and Warner (1980, p. 253)).

The test statistic for abnormal return in any given event window day t is the ratio of the aggregated abnormal at day t to its estimated standard deviation. Similarly the test statistic Θ for cumulative abnormal returns between any days t_1 and t_2 in the event window is

$$\Theta = \frac{\overline{CAR}(t_1, t_2)}{\sqrt{\text{var}\big(\overline{CAR}(t_1, t_2)\big)}}.$$

The distribution of both test statistics follow Student-*t* with $(N - 2)$ degrees of freedom. When the sample size is large, the test statistic is assumed to be unit normal.

7. Empirical results

There are four hypotheses about the existence of abnormal returns around holdings revision date, which this thesis is going to test. First hypothesis evaluates whether there exist abnormal returns around holdings revision date in general. Second hypothesis narrows the test to only those company-years when there is a change in the nominator. In third hypothesis, the scope of the test is on firms that are non-government owned. Finally, the fourth hypothesis is a combination of the second and third hypotheses, and evaluates non-government owned companies when there is a change in the nominator.

As briefly discussed in the methodology section, the length of the estimation window was set to 100 trading days and 11-days as well as 41-days event windows were used. The use of two different event window lengths was chosen so that I can account for the shorter and longer period cumulative abnormal returns around the event date. The results were exactly the same when 150 trading days estimation window were used, and hence these are not reported. An even longer 200 trading days estimation window would have required exclusion of 22 event dates (20% of the whole sample), which would have had a significant effect on the results, and therefore was not used in the study.

Testing each hypotheses required some adjustments to the data, which are discussed in detail under each section. For example, some companies did not have enough share price data before the event date, so the same estimation window could not have been used, and thus these company-years were excluded from the study. Additionally, if a company had some major event that had an effect on the share price during the event window in any year, then these years were not considered in the study.

Another aspect that needs to be considered is how to deal with companies that have dual share classes. Firms with dual share class and shareholders' nomination board are Aktia Oyj, Kesla Oyj, Stockmann Oyj, Stora Enso Oyj and Ålandsbanken Oyj. Since the main difference between the share classes is that the other class has more voting rights (voting share) compared to the other class (non-voting share), a shareholder who competes for the shareholders' nomination board places would be better off buying the voting shares than the non-voting shares. That is not possible in the case of Kesla Oyj since the voting shares are not publicly listed. Another thing is that there are often notably less voting shares and the illiquidity can make buying those shares a difficult task. Therefore, the largest shareholders could also buy the non-voting shares to increase their position before the holdings revision date.

Because the inclusion of just voting shares might not capture the whole effect, an alternative solution might be to consider both share classes in the study. This approach has a severe drawback since then firms that have dual share class would have double weight in the evaluation, assuming that the correlation between the share classes is strong and positive. Additionally, the strong positive correlation between the share classes would cause the returns and abnormal returns to have high cross-sectional dependence. As discussed in the methodology section the cross-sectional dependence of the abnormal returns results in distorted test-statistics and the traditional tests cannot be carried out. Therefore, using both share classes is problematic and will not be considered in the study. Since there seem not to be a single best solution for handling the dual share classes, I am going to test all the hypotheses using samples including only voting shares and only non-voting shares, where applicable, and report all the results. A further discussion is provided when the results deviate from each other.

7.1. Abnormal returns around all holdings revision date

Testing the first hypothesis, whether abnormal returns exist around holdings revision date in general, includes all the company-years that have enough preceding share price data so that the estimation and event window can be formed. Thus, the holdings revision dates of Asiakastieto Oyj 2015 and Kemira Oyj 2009 are excluded from the analysis. In addition, Componenta Oyj announced that it had filed for restructuring on the day after its holdings revision date in 2016[4], which had a significant negative reaction to the company share and therefore is removed from the consideration. After the removal of dual share classes the size of the samples including voting and non-voting shares are 191 company holdings revision dates.

The mean abnormal returns for 41-days event window, presented in the Table 9, are similar to both samples and there seem to be no positive abnormal returns before the holdings revision date. The event date mean abnormal returns are almost the same for both samples -0.0018 and -0.0021, which are not statistically significant from zero with a standard error of 0.0015. The only statistically significant mean abnormal returns at 5-% level are negative, and are probably generated by noise in the data. There are no sign of positive average abnormal returns before the event date that would be a sign of competition for the shareholders' nomination board places, and in fact, the negative event date average abnormal return would suggest merely excessively selling the shares rather than buying them.

[4] Componenta Corporation Stock Exchange Release on 1.9.2016: https://newsclient.omxgroup.com/cdsPublic/viewDisclosure.action?disclosureId=725737&lang=en

Table 9. Sample abnormal and cumulative abnormal returns for all holdings revision dates
(event window = 41 trading days)

Abnormal Returns - t-stat table (n = 191)
*Critical values: 10-% level (1.653) *,*
*5-% level (1.972) **, and 1-% level (2.602) ****

Cumulative Abnormal Returns - t-stat table (n = 191)
*Critical values: 10-% level (1.653) *,*
*5-% level (1.972) **, and 1-% level (2.602) ****

	Voting shares			**Non-voting shares**			**Voting shares**			**Non-voting shares**		
Day	AR	*t-value*		AR	*t-value*		CAR	*t-value*		CAR	*t-value*	
-20	0.0001	*0.067*		-0.0001	*-0.071*		0.0001	*0.067*		-0.0001	*-0.071*	
-19	-0.0005	*-0.337*		-0.0002	*-0.142*		-0.0004	*-0.191*		-0.0003	*-0.150*	
-18	0.0000	*0.000*		0.0001	*0.071*		-0.0004	*-0.156*		-0.0003	*-0.123*	
-17	0.0002	*0.135*		0.0007	*0.497*		-0.0002	*-0.067*		0.0005	*0.177*	
-16	-0.0004	*-0.270*		-0.0002	*-0.142*		-0.0006	*-0.181*		0.0002	*0.063*	
-15	-0.0013	*-0.877*		-0.0021	*-1.490*		-0.0019	*-0.524*		-0.0019	*-0.550*	
-14	0.0020	*1.350*		0.0026	*1.845*	*	0.0001	*0.026*		0.0007	*0.188*	
-13	0.0005	*0.337*		-0.0002	*-0.142*		0.0005	*0.119*		0.0005	*0.125*	
-12	-0.0002	*-0.135*		0.0002	*0.142*		0.0003	*0.067*		0.0007	*0.166*	
-11	-0.0035	*-2.362*	**	-0.0039	*-2.767*	***	-0.0031	*-0.662*		-0.0032	*-0.718*	
-10	0.0009	*0.607*		0.0007	*0.497*		-0.0023	*-0.468*		-0.0025	*-0.535*	
-9	0.0001	*0.067*		-0.0004	*-0.284*		-0.0022	*-0.429*		-0.0029	*-0.594*	
-8	-0.0009	*-0.607*		-0.0006	*-0.426*		-0.0031	*-0.580*		-0.0035	*-0.689*	
-7	-0.0054	*-3.645*	***	-0.0061	*-4.328*	***	-0.0085	*-1.533*		-0.0096	*-1.820*	*
-6	-0.0016	*-1.080*		-0.0009	*-0.639*		-0.0101	*-1.760*	*	-0.0106	*-1.942*	*
-5	0.0000	*0.000*		-0.0009	*-0.639*		-0.0101	*-1.704*	*	-0.0115	*-2.040*	**
-4	0.0001	*0.067*		0.0006	*0.426*		-0.0100	*-1.637*		-0.0109	*-1.876*	*
-3	-0.0021	*-1.417*		-0.0021	*-1.490*		-0.0121	*-1.925*	*	-0.0130	*-2.174*	**
-2	0.0017	*1.147*		0.0018	*1.277*		-0.0103	*-1.595*		-0.0112	*-1.823*	*
-1	-0.0014	*-0.945*		-0.0014	*-0.993*		-0.0118	*-1.781*	*	-0.0125	*-1.983*	**
0	-0.0018	*-1.215*		-0.0021	*-1.490*		-0.0135	*-1.988*	**	-0.0146	*-2.260*	**
1	0.0003	*0.202*		-0.0003	*-0.213*		-0.0132	*-1.899*	*	-0.0149	*-2.254*	**
2	-0.0008	*-0.540*		-0.0008	*-0.568*		-0.0140	*-1.970*	*	-0.0157	*-2.323*	**
3	0.0011	*0.742*		0.0014	*0.993*		-0.0129	*-1.777*	*	-0.0142	*-2.056*	**
4	-0.0001	*-0.067*		-0.0002	*-0.142*		-0.0131	*-1.768*	*	-0.0145	*-2.057*	**
5	0.0006	*0.405*		0.0007	*0.497*		-0.0125	*-1.655*	*	-0.0138	*-1.920*	*
6	0.0001	*0.067*		0.0008	*0.568*		-0.0124	*-1.611*		-0.0130	*-1.775*	*
7	-0.0010	*-0.675*		-0.0017	*-1.206*		-0.0134	*-1.709*	*	-0.0148	*-1.984*	**
8	-0.0028	*-1.890*	*	-0.0019	*-1.348*		-0.0162	*-2.030*	**	-0.0167	*-2.200*	**
9	0.0019	*1.282*		0.0005	*0.355*		-0.0142	*-1.750*	*	-0.0161	*-2.085*	**
10	-0.0020	*-1.350*		-0.0015	*-1.064*		-0.0162	*-1.964*	*	-0.0176	*-2.243*	**
11	-0.0028	*-1.890*	*	-0.0038	*-2.696*	***	-0.0190	*-2.267*	**	-0.0214	*-2.684*	***
12	-0.0029	*-1.957*	*	-0.0035	*-2.483*	**	-0.0219	*-2.573*	**	-0.0250	*-3.088*	***
13	0.0020	*1.350*		0.0017	*1.206*		-0.0199	*-2.303*	**	-0.0232	*-2.823*	***
14	-0.0008	*-0.540*		0.0000	*0.000*		-0.0206	*-2.350*	**	-0.0232	*-2.782*	***
15	-0.0011	*-0.742*		-0.0019	*-1.348*		-0.0218	*-2.452*	**	-0.0251	*-2.968*	***
16	0.0001	*0.067*		0.0003	*0.213*		-0.0217	*-2.408*	**	-0.0248	*-2.893*	***
17	-0.0003	*-0.202*		0.0001	*0.071*		-0.0220	*-2.409*	**	-0.0248	*-2.854*	***
18	-0.0010	*-0.675*		-0.0009	*-0.639*		-0.0229	*-2.475*	**	-0.0257	*-2.920*	***
19	-0.0007	*-0.472*		-0.0011	*-0.780*		-0.0236	*-2.519*	**	-0.0268	*-3.006*	***
20	-0.0016	*-1.080*		-0.0019	*-1.348*		-0.0252	*-2.656*	***	-0.0286	*-3.169*	***

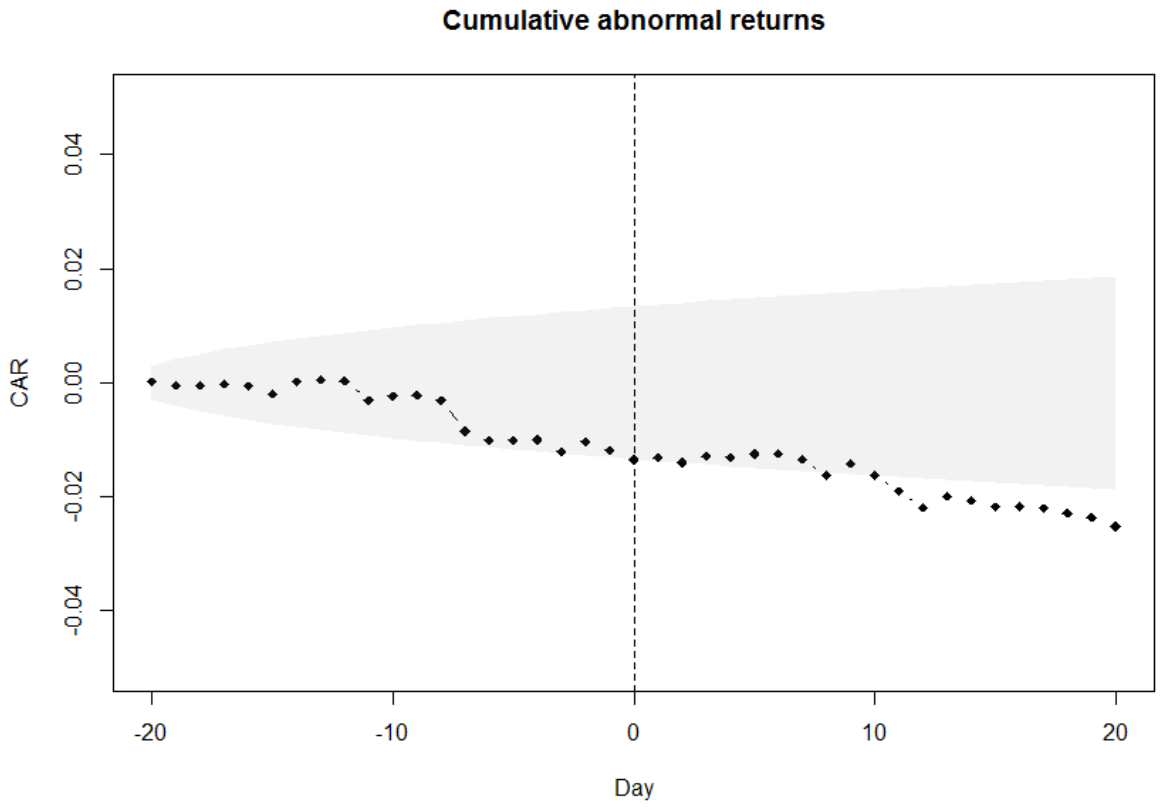

Figure 3. Voting share sample CARs around all revision dates

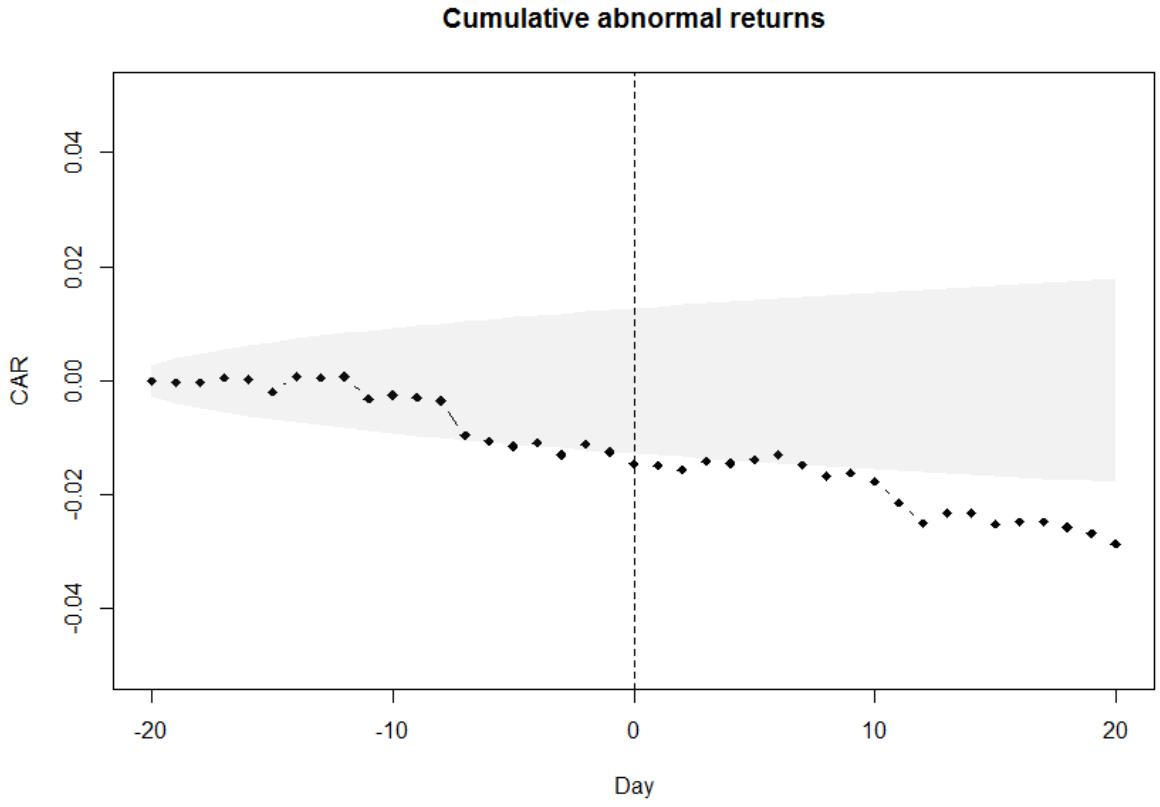

Figure 4. Non-voting share sample CARs around all revision dates

Neither the average cumulative abnormal returns for 41-days event window (see Table 9), provide any proof of positive cumulative abnormal returns, due to competition of nomination rights, before holdings revision date. On the contrary, both samples have a statistically significant negative event date average CAR on the 5-% level, -0.0135 for voting and -0.0146 for non-voting sample, and the average CAR plots in Figures 3 and 4 are downward sloping. For the non-voting shares sample the mean CARs are more negative across the whole event window, and remain statistically significant from 7 days before the event until the end of the event window on the 10-% level.

In the shorter 11-days event window, all the mean abnormal and cumulative abnormal returns in both samples are statistically insignificant at the 10-% level (see Table 10). Hence, the average abnormal returns seem to be flat in the short period around the holdings revision date and the event day CARs remain negative.

There are no evidence for positive abnormal returns around holdings revision date in general and the first null hypotheses is not rejected. Vice versa, there seems to be a pattern that companies with shareholders' nomination boards produce negative abnormal returns around the holdings revision date in general. A clear downward drift can be seen in the cumulative abnormal returns even before the holdings revision date, and that drift becomes statistically more and more significant after the event date.

Table 10. Sample abnormal and cumulative abnormal returns for all holdings revision dates
(event window = 11 trading days)

	Abnormal Returns - t-stat table (n = 191) Critical values: 10-% level (1.653) *, 5-% level (1.972) **, and 1-% level (2.602) ***				**Cumulative Abnormal Returns** - t-stat table (n = 191) Critical values: 10-% level (1.653) *, 5-% level (1.972) **, and 1-% level (2.602) ***			
	Voting shares		**Non-voting shares**		**Voting shares**		**Non-voting shares**	
Day	AR	*t-value*	AR	*t-value*	CAR	*t-value*	CAR	*t-value*
-5	0.0002	*0.135*	-0.0007	*-0.498*	0.0002	*0.135*	-0.0007	*-0.498*
-4	0.0001	*0.067*	0.0006	*0.427*	0.0002	*0.095*	-0.0001	*-0.050*
-3	-0.0019	*-1.282*	-0.0020	*-1.424*	-0.0017	*-0.662*	-0.0021	*-0.863*
-2	0.0017	*1.147*	0.0018	*1.281*	0.0000	*0.000*	-0.0003	*-0.107*
-1	-0.0016	*-1.080*	-0.0015	*-1.068*	-0.0015	*-0.453*	-0.0017	*-0.541*
0	-0.0017	*-1.147*	-0.0019	*-1.353*	-0.0032	*-0.882*	-0.0037	*-1.075*
1	0.0004	*0.270*	-0.0001	*-0.071*	-0.0028	*-0.714*	-0.0038	*-1.022*
2	-0.0009	*-0.607*	-0.0009	*-0.641*	-0.0037	*-0.883*	-0.0047	*-1.183*
3	0.0013	*0.877*	0.0016	*1.139*	-0.0024	*-0.540*	-0.0031	*-0.736*
4	0.0002	*0.135*	0.0001	*0.071*	-0.0022	*-0.470*	-0.0030	*-0.675*
5	0.0006	*0.405*	0.0007	*0.498*	-0.0016	*-0.326*	-0.0023	*-0.494*

7.2. Abnormal returns around holdings revision date when the nominator changes

In general, there seem not to be positive abnormal returns before holdings revision date. Because the lack of positive abnormal returns before holdings revision date, there does not seem to be competition for the shareholders' nomination board places on average, at least such that would affect share prices. On the other hand, the competition might exist for some firms in some years but is not visible in the whole sample. When there is a change in the nominator, it might be a sign of that competition. Therefore, testing the second hypothesis, the existence of abnormal returns around holdings revision date when there is a change in the nominator might yield different results.

There are 64 holdings revision dates when at least one of the nominators of the shareholders' nomination board changed. Nominator changes occurred in 23 companies out of the 34. For some firms the data was available only for one year, which makes the occurrence of changes obviously impossible but there was some companies like Ålandsbanken Oyj and Stora Enso Oyj where no changes in the shareholders' nomination board happened even 4 and 12 years after the founding of the board. Since Componenta announced its filing for the restructuring during the event window of 2016 that company-year is excluded, and the final sample consist of 63 holdings revision dates. Finally, there are no companies having dual share classes in the sample so no adjustments for that are required.

Even though only years when there is a change in the nominator are evaluated, the mean abnormal returns for the 41-days event window, presented in Table 11, provide no evidence against the second null hypothesis. The event day sample abnormal return is again negative -0.0009 and statistically insignificant, with a standard error of 0.0027. There is only one statistically significant positive average abnormal return, at 5-% level, before the event day. On the other hand, there are two significant negative sample abnormal returns before the event day and no conclusions can be made against the null hypothesis.

The sample cumulative abnormal return is again downward drifting (see Figure 5), similar to the first hypothesis and becomes statistically significant negative first time 7 days before the holdings revision date and again three as well as one day before the event day, at the 10-% level. There is no sign of positive mean CAR that would result from the competition for the shareholders' nomination board rights.

Table 11. Sample abnormal and cumulative abnormal returns when there is a change in nominator (event window = 41 trading days)

Abnormal Returns & CARs - t-stat table (n = 63)

*Critical values: 10-% level (1.670) *, 5-% level (1.999) **, and 1-% level (2.657) ****

	Abnormal returns			**CARs**		
Day	AR	*t-value*		CAR	*t-value*	
-20	0.0007	*0.264*		0.0007	*0.264*	
-19	0.0009	*0.340*		0.0016	*0.427*	
-18	-0.0032	*-1.208*		-0.0016	*-0.349*	
-17	-0.0024	*-0.906*		-0.0041	*-0.774*	
-16	0.0053	*2.000*	**	0.0012	*0.203*	
-15	-0.0004	*-0.151*		0.0008	*0.123*	
-14	0.0019	*0.717*		0.0027	*0.385*	
-13	-0.0026	*-0.981*		0.0001	*0.013*	
-12	-0.0018	*-0.679*		-0.0017	*-0.214*	
-11	-0.0064	*-2.415*	**	-0.0081	*-0.967*	
-10	0.0021	*0.792*		-0.0060	*-0.683*	
-9	-0.0007	*-0.264*		-0.0067	*-0.730*	
-8	-0.0013	*-0.491*		-0.0080	*-0.837*	
-7	-0.0091	*-3.434*	***	-0.0171	*-1.725*	*
-6	-0.0009	*-0.340*		-0.0180	*-1.754*	*
-5	0.0017	*0.641*		-0.0163	*-1.538*	
-4	-0.0011	*-0.415*		-0.0174	*-1.592*	
-3	-0.0052	*-1.962*	*	-0.0226	*-2.010*	**
-2	0.0034	*1.283*		-0.0192	*-1.662*	
-1	-0.0008	*-0.302*		-0.0200	*-1.688*	*
0	-0.0009	*-0.340*		-0.0209	*-1.721*	*
1	-0.0039	*-1.472*		-0.0248	*-1.995*	*
2	0.0001	*0.038*		-0.0247	*-1.943*	*
3	0.0006	*0.226*		-0.0242	*-1.864*	*
4	0.0009	*0.340*		-0.0232	*-1.751*	*
5	0.0026	*0.981*		-0.0206	*-1.524*	
6	0.0026	*0.981*		-0.0181	*-1.314*	
7	-0.0043	*-1.623*		-0.0224	*-1.597*	
8	-0.0009	*-0.340*		-0.0233	*-1.633*	
9	0.0007	*0.264*		-0.0225	*-1.550*	
10	-0.0055	*-2.075*	**	-0.0281	*-1.904*	*
11	-0.0009	*-0.340*		-0.0290	*-1.934*	*
12	-0.0029	*-1.094*		-0.0319	*-2.095*	**
13	0.0007	*0.264*		-0.0312	*-2.019*	**
14	-0.0012	*-0.453*		-0.0324	*-2.067*	**
15	-0.0022	*-0.830*		-0.0345	*-2.170*	**
16	0.0011	*0.415*		-0.0334	*-2.072*	**
17	-0.0033	*-1.245*		-0.0367	*-2.247*	**
18	-0.0029	*-1.094*		-0.0396	*-2.393*	**
19	0.0000	*0.000*		-0.0397	*-2.369*	**
20	-0.0090	*-3.396*	***	-0.0486	*-2.864*	***

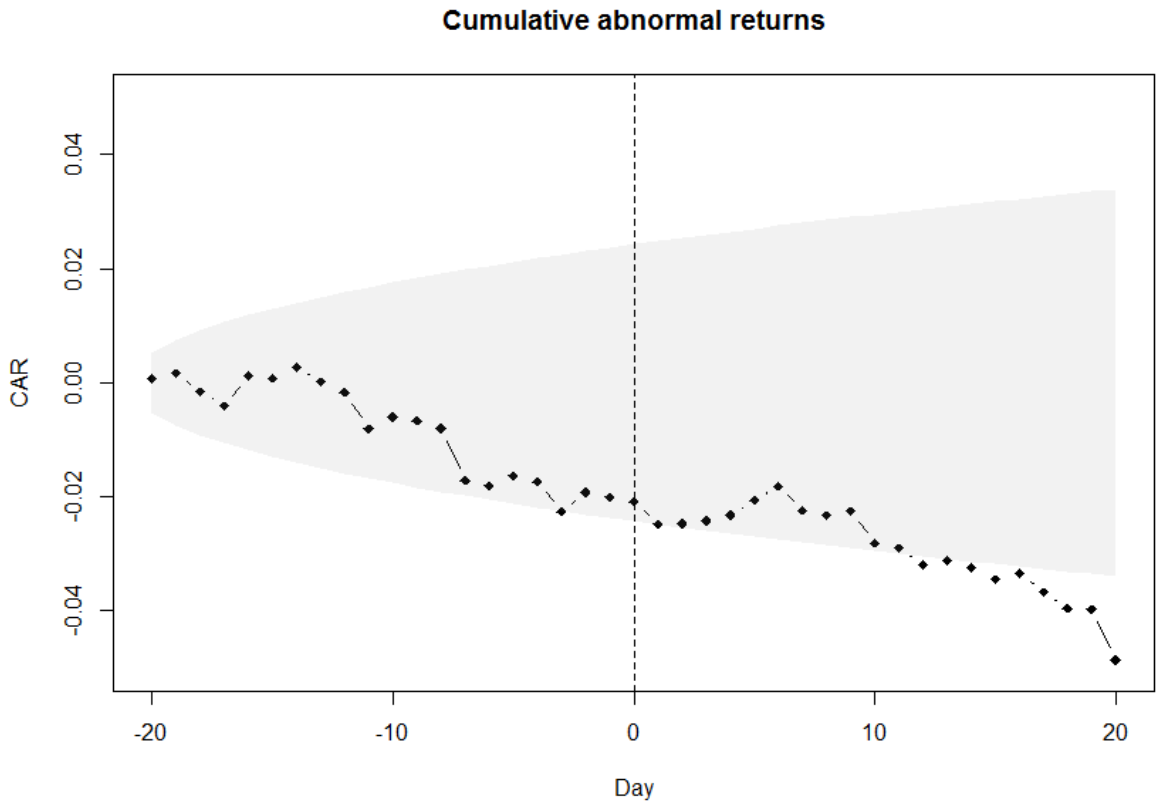

Figure 5. Sample CARs around holdings revision change when there is a change in nominator

Neither, is there any sign of positive mean abnormal or cumulative abnormal returns in the shorter 11-days event window before the event day, reported in Table 12. None of the sample abnormal or cumulative abnormal returns are significant from zero at the 5-% level. The mean CAR seems to be flat in the short-term around the event day, with negative statistically insignificant -0.0022 value on the event day, similar as when all the company-years were included in the first hypothesis.

No evidence can be found against the second the null hypothesis, and it stays valid. Seems like the change in the nominator of shareholders' nomination board is no sign of a competition for the nomination rights, at least in such a magnitude that would raise the share price to yield abnormal positive returns. The second null hypothesis is not rejected and stays valid.

Table 12. Sample abnormal and cumulative abnormal returns when there is a change in nominator (event window = 11 trading days)

Abnormal Returns & CARs - t-stat table (n = 63)
*Critical values: 10-% level (1.670) *, 5-% level (1.999) **, and 1-% level (2.657) ****

	Abnormal returns			**CARs**	
Day	AR	*t-value*		CAR	*t-value*
-5	0.0020	*0.768*		0.0020	*0.768*
-4	-0.0012	*-0.461*		0.0008	*0.217*
-3	-0.0048	*-1.843*	*	-0.0040	*-0.886*
-2	0.0034	*1.305*		-0.0006	*-0.115*
-1	-0.0009	*-0.345*		-0.0015	*-0.258*
0	-0.0007	*-0.269*		-0.0022	*-0.345*
1	-0.0041	*-1.574*		-0.0063	*-0.914*
2	-0.0002	*-0.077*		-0.0065	*-0.882*
3	0.0010	*0.384*		-0.0055	*-0.704*
4	0.0013	*0.499*		-0.0042	*-0.510*
5	0.0023	*0.883*		-0.0019	*-0.220*

7.3. Abnormal returns around holdings revision date for non-government owned firms

The idea behind the third hypothesis is to test whether the ownership and particularly the government having a major stake in the company might have an effect on the abnormal returns around holdings revision date. For an activist investor or group who wants to influence the company decision-making through nominating their representative to the board, companies that are governmentally owned are not the most attractive targets. The government ownership is often focused on specific industries, where the government has some special interest that most of the time differs from maximal value creation to shareholders. To ensure that the special interest is secured in the future as well, the government does not want to give up its ownership, which makes the activist's attempt to acquire the shares needed to influence the decision-making much harder. Therefore, the activist investors or other parties who want to affect the company decision-making through board nominations would more likely choose non-government owned companies for their targets, and thus the competition for the shareholders' nomination board places would more likely exist among these firms.

Table 13. Sample abnormal and cumulative abnormal returns for non-government owned firms
(event window = 41 trading days)

Abnormal Returns - t-stat table (n = 78)
*Critical values: 10-% level (1.665) *, 5-% level (1.991) **, and 1-% level (2.641) ****

Cumulative Abnormal Returns - t-stat table (n = 78)
*Critical values: 10-% level (1.665) *, 5-% level (1.991) **, and 1-% level (2.641) ****

	Voting shares		**Non-voting shares**		**Voting shares**		**Non-voting shares**	
Day	AR	*t-value*	AR	*t-value*	CAR	*t-value*	CAR	*t-value*
-20	-0.0004	*-0.173*	0.0010	*0.476*	-0.0004	*-0.173*	0.0010	*0.476*
-19	-0.0014	*-0.607*	-0.0002	*-0.095*	-0.0018	*-0.552*	0.0008	*0.269*
-18	0.0026	*1.127*	0.0022	*1.046*	0.0008	*0.200*	0.0030	*0.824*
-17	-0.0019	*-0.824*	-0.0010	*-0.476*	-0.0011	*-0.238*	0.0020	*0.476*
-16	-0.0005	*-0.217*	0.0000	*0.000*	-0.0016	*-0.310*	0.0020	*0.425*
-15	-0.0031	*-1.344*	-0.0040	*-1.903* *	-0.0047	*-0.832*	-0.0021	*-0.408*
-14	0.0008	*0.347*	0.0016	*0.761*	-0.0039	*-0.639*	-0.0004	*-0.072*
-13	0.0004	*0.173*	-0.0005	*-0.238*	-0.0035	*-0.536*	-0.0010	*-0.168*
-12	-0.0008	*-0.347*	0.0009	*0.428*	-0.0042	*-0.607*	-0.0001	*-0.016*
-11	-0.0010	*-0.433*	-0.0019	*-0.904*	-0.0053	*-0.727*	-0.0020	*-0.301*
-10	0.0033	*1.431*	0.0037	*1.760* *	-0.0020	*-0.261*	0.0017	*0.244*
-9	-0.0016	*-0.694*	-0.0025	*-1.189*	-0.0036	*-0.451*	-0.0008	*-0.110*
-8	-0.0008	*-0.347*	-0.0006	*-0.285*	-0.0044	*-0.529*	-0.0013	*-0.171*
-7	-0.0024	*-1.040*	-0.0031	*-1.474*	-0.0068	*-0.788*	-0.0044	*-0.559*
-6	-0.0016	*-0.694*	-0.0016	*-0.761*	-0.0084	*-0.940*	-0.0061	*-0.749*
-5	0.0017	*0.737*	0.0012	*0.571*	-0.0067	*-0.726*	-0.0048	*-0.571*
-4	-0.0009	*-0.390*	0.0006	*0.285*	-0.0076	*-0.799*	-0.0042	*-0.484*
-3	0.0010	*0.433*	-0.0008	*-0.381*	-0.0066	*-0.674*	-0.0050	*-0.561*
-2	-0.0009	*-0.390*	-0.0002	*-0.095*	-0.0075	*-0.746*	-0.0053	*-0.578*
-1	-0.0016	*-0.694*	-0.0015	*-0.713*	-0.0090	*-0.872*	-0.0068	*-0.723*
0	0.0015	*0.650*	0.0011	*0.523*	-0.0076	*-0.719*	-0.0057	*-0.592*
1	0.0016	*0.694*	0.0006	*0.285*	-0.0059	*-0.545*	-0.0052	*-0.527*
2	-0.0053	*-2.298* **	-0.0050	*-2.378* **	-0.0113	*-1.021*	-0.0102	*-1.012*
3	-0.0004	*-0.173*	0.0001	*0.048*	-0.0117	*-1.035*	-0.0101	*-0.981*
4	-0.0003	*-0.130*	-0.0014	*-0.666*	-0.0120	*-1.040*	-0.0115	*-1.094*
5	-0.0002	*-0.087*	-0.0003	*-0.143*	-0.0122	*-1.037*	-0.0118	*-1.101*
6	-0.0008	*-0.347*	0.0002	*0.095*	-0.0130	*-1.085*	-0.0116	*-1.062*
7	-0.0017	*-0.737*	-0.0019	*-0.904*	-0.0147	*-1.204*	-0.0135	*-1.213*
8	-0.0048	*-2.081* **	-0.0026	*-1.237*	-0.0195	*-1.570*	-0.0161	*-1.422*
9	0.0024	*1.040*	-0.0013	*-0.618*	-0.0171	*-1.353*	-0.0174	*-1.511*
10	-0.0039	*-1.691* *	-0.0028	*-1.332*	-0.0209	*-1.627*	-0.0203	*-1.734* *
11	-0.0030	*-1.300*	-0.0038	*-1.807* *	-0.0240	*-1.839* *	-0.0241	*-2.026* **
12	0.0050	*2.167* **	0.0021	*0.999*	-0.0190	*-1.434*	-0.0220	*-1.822* *
13	-0.0009	*-0.390*	-0.0009	*-0.428*	-0.0199	*-1.479*	-0.0229	*-1.868* *
14	-0.0005	*-0.217*	0.0003	*0.143*	-0.0204	*-1.495*	-0.0226	*-1.817* *
15	-0.0024	*-1.040*	-0.0027	*-1.284*	-0.0228	*-1.647*	-0.0253	*-2.006* **
16	-0.0006	*-0.260*	-0.0010	*-0.476*	-0.0235	*-1.675* *	-0.0263	*-2.056* **
17	-0.0003	*-0.130*	-0.0006	*-0.285*	-0.0238	*-1.674* *	-0.0269	*-2.076* **
18	0.0000	*0.000*	-0.0002	*-0.095*	-0.0238	*-1.652*	-0.0271	*-2.064* **
19	-0.0042	*-1.821* *	-0.0036	*-1.712* *	-0.0280	*-1.919* *	-0.0307	*-2.309* **
20	-0.0011	*-0.477*	-0.0022	*-1.046*	-0.0291	*-1.970* *	-0.0329	*-2.444* **

The sample of non-government owned companies event days consist of 80 holdings revision dates, of which Componenta 2016 and Asiakastieto 2015 as in other parts. Overall, there are holdings revision dates from 23 companies, including Aktia Oyj, Stockmann Oyj, and Ålandsbanken Oyj that have dual share classes. To account for the dual share classes the sample is divided into voting and non-voting share test samples, both of them including 78 events.

The mean abnormal returns for both test samples for the 41-days event window are reported in Table 13. There are only minor differences between the sample abnormal returns, and neither sample has any abnormal returns that would be significantly different from zero at 5-% level, before the event day. The event day sample abnormal returns are both positive, 0.0015 and

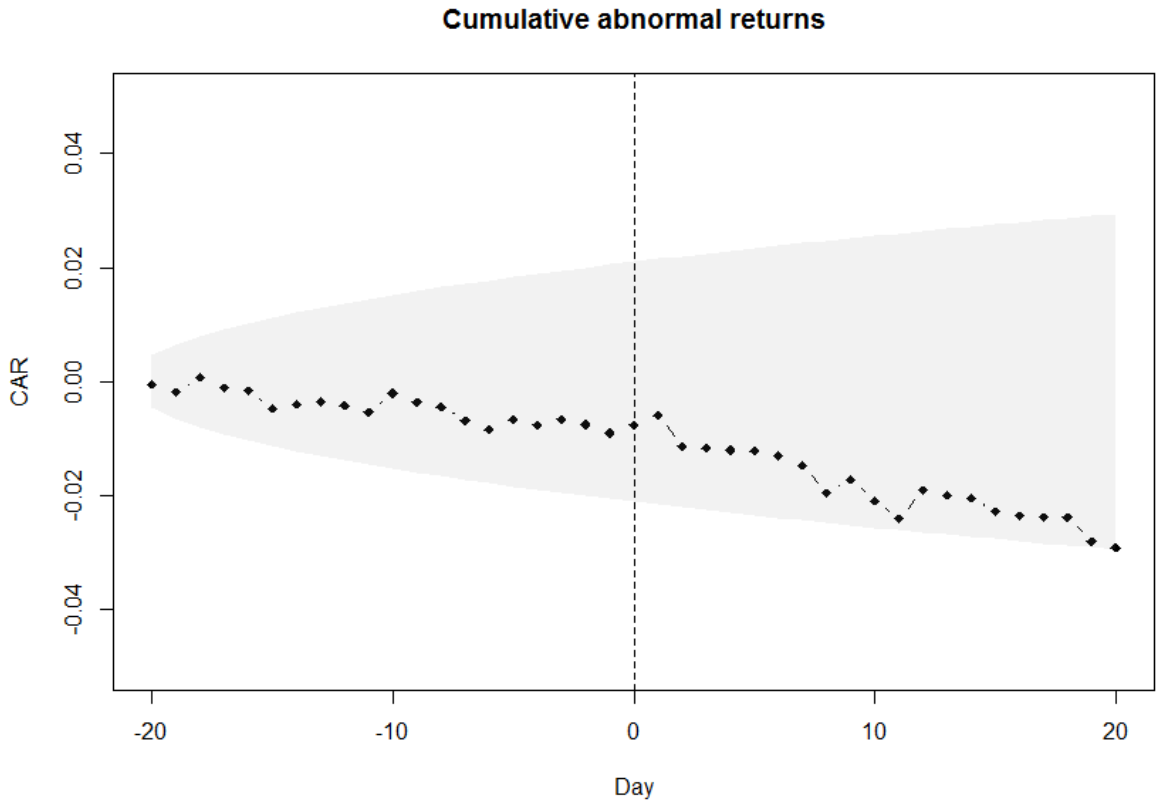

Figure 6. Voting share sample CARs for non-government owned firms

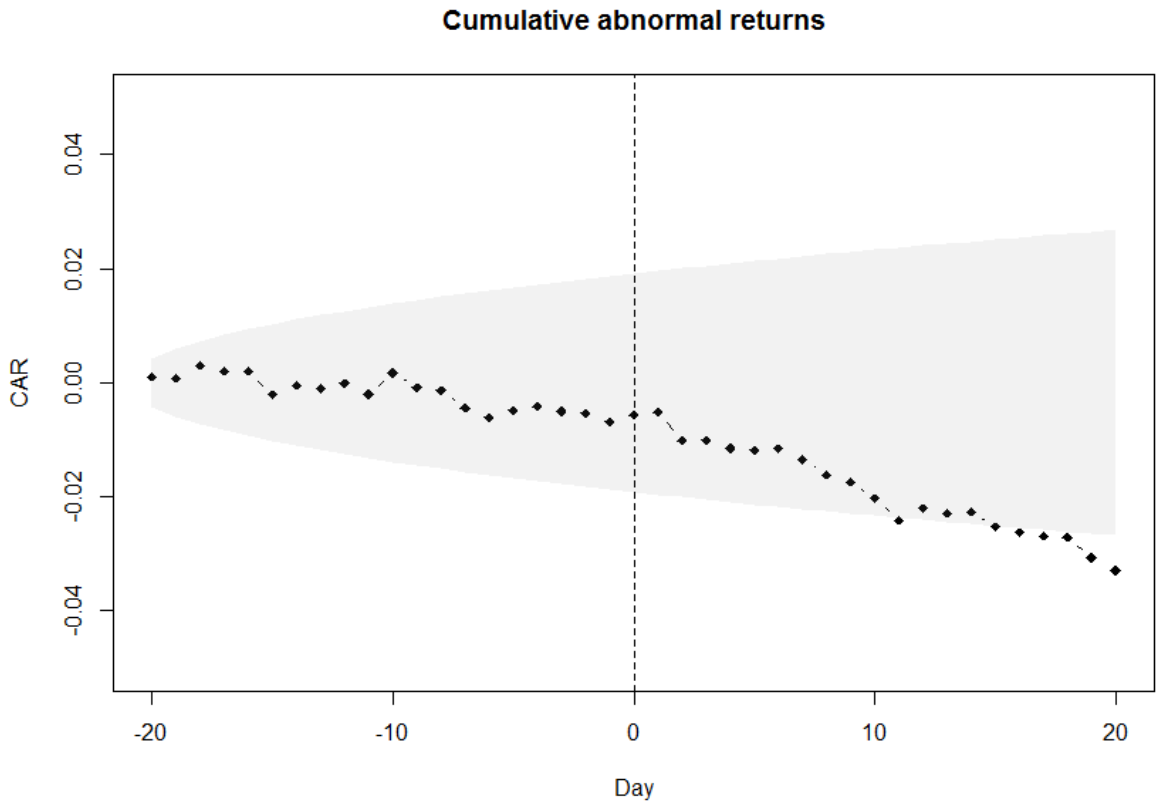

Figure 7. Non-voting share sample CARs for non-government owned firms

0.0011, but with standard errors of 0.0023 and 0.0021, respectively, remain statistically insignificant from zero. The only average abnormal return for both voting and non-voting samples that is significant at 5-% level is negative and happens two days after the event day. Again, there are no indications that would back the rejection of the null.

Plotting the mean CARs reveal almost identical graphs for both samples (Figures 6 and 7) before and shortly after the event day. In both samples the average CAR is close to flat before the event day, slightly negative at event day -0.0076 for voting and -0.0057 for non-voting sample, and then drifts to statistically significant negative before the end of the event window.

In the shorter 11-days event window, there are no signs of positive mean abnormal or cumulative abnormal returns before the holdings revision date (see Table 14). Although, the sign of both samples' mean CARs changes to positive the values remain so close to zero that they are both statistically insignificant.

The non-government ownership does not lead to positive abnormal returns before the holdings revision date either. Hence, there is no evidence against the third null hypothesis and it is not rejected.

Table 14. Sample abnormal and cumulative abnormal returns for non-government owned firms
(event window = 11 trading days)

	Abnormal Returns - t-stat table (n = 78) *Critical values: 10-% level (1.665) *, 5-% level (1.991) **, and 1-% level (2.641) ******					**Cumulative Abnormal Returns** - t-stat table (n = 78) *Critical values: 10-% level (1.665) *, 5-% level (1.991) **, and 1-% level (2.641) ******			
	Voting shares		**Non-voting shares**			**Voting shares**		**Non-voting shares**	
Day	AR	*t-value*	AR	*t-value*		CAR	*t-value*	CAR	*t-value*
-5	0.0018	*0.756*	0.0013	*0.599*		0.0018	*0.756*	0.0013	*0.599*
-4	-0.0010	*-0.420*	0.0004	*0.184*		0.0007	*0.208*	0.0017	*0.554*
-3	0.0009	*0.378*	-0.0008	*-0.368*		0.0016	*0.388*	0.0009	*0.239*
-2	-0.0009	*-0.378*	-0.0002	*-0.092*		0.0007	*0.147*	0.0007	*0.161*
-1	-0.0016	*-0.672*	-0.0016	*-0.737*		-0.0009	*-0.169*	-0.0009	*-0.185*
0	0.0013	*0.546*	0.0010	*0.461*		0.0004	*0.069*	0.0001	*0.019*
1	0.0018	*0.756*	0.0008	*0.368*		0.0022	*0.349*	0.0009	*0.157*
2	-0.0053	*-2.226* **	-0.0050	*-2.303* **		-0.0031	*-0.460*	-0.0041	*-0.668*
3	-0.0006	*-0.252*	-0.0001	*-0.046*		-0.0036	*-0.504*	-0.0042	*-0.645*
4	-0.0002	*-0.084*	-0.0014	*-0.645*		-0.0038	*-0.505*	-0.0056	*-0.816*
5	-0.0002	*-0.084*	-0.0004	*-0.184*		-0.0041	*-0.519*	-0.0059	*-0.819*

A noticeable fact is that governmental ownership seem to have a slight effect on the share performance before the holdings revision date, and non-government owned firms seem to perform better than their government owned peers by having less negative pre-event abnormal returns.

7.4. Abnormal returns around holdings revision date for non-government owned firms when the nominator changes

The fourth and final hypothesis tests whether a change in the nominators of non-government owned firms, would lead to positive abnormal returns before holdings revision date that could be due to the competition for the shareholders' nomination board places. As the second and the third hypothesis were not rejected, neither the change in the nominators nor being a non-government owned company did lead to positive abnormal returns before holdings revision dates, alone. That does not entail that these two features together might not lead to positive abnormal returns before holdings revision date, and hence should be tested.

Because of the two restrictions on company-year features, the sample size is significantly smaller than in the other tests. There are only 24 holdings revision dates, when the nominators have changed for non-government owned firms. Additionally, one of these occasions is Componenta 2016 that needs to be excluded from the test as in previous sections. Thus, the test

Table 15. Sample abnormal and cumulative abnormal returns for non-government owned firms when nominator changes (event window = 41 trading days)

Abnormal Returns & CARs - t-stat table (n = 23)
*Critical values: 10-% level (1.717) *, 5-% level (2.074) **, and 1-% level (2.819) ****

	Abnormal returns			**CARs**		
Day	AR	*t-value*		CAR	*t-value*	
-20	0.0044	*1.131*		0.0044	*1.131*	
-19	-0.0025	*-0.642*		0.0019	*0.345*	
-18	-0.0066	*-1.696*		-0.0047	*-0.697*	
-17	-0.0038	*-0.976*		-0.0085	*-1.092*	
-16	0.0039	*1.002*		-0.0046	*-0.529*	
-15	-0.0032	*-0.822*		-0.0078	*-0.818*	
-14	-0.0021	*-0.540*		-0.0098	*-0.952*	
-13	-0.0059	*-1.516*		-0.0157	*-1.426*	
-12	-0.0015	*-0.385*		-0.0172	*-1.473*	
-11	-0.0044	*-1.131*		-0.0217	*-1.763*	*
-10	0.0051	*1.310*		-0.0166	*-1.286*	
-9	-0.0034	*-0.874*		-0.0199	*-1.476*	
-8	-0.0009	*-0.231*		-0.0208	*-1.482*	
-7	-0.0027	*-0.694*		-0.0235	*-1.614*	
-6	-0.0045	*-1.156*		-0.0281	*-1.864*	*
-5	-0.0031	*-0.797*		-0.0312	*-2.004*	*
-4	0.0009	*0.231*		-0.0303	*-1.888*	*
-3	-0.0015	*-0.385*		-0.0318	*-1.926*	*
-2	-0.0015	*-0.385*		-0.0333	*-1.963*	*
-1	-0.0008	*-0.206*		-0.0341	*-1.959*	*
0	0.0095	*2.441*	**	-0.0246	*-1.379*	
1	-0.0016	*-0.411*		-0.0262	*-1.435*	
2	-0.0085	*-2.184*	**	-0.0347	*-1.859*	*
3	-0.0024	*-0.617*		-0.0370	*-1.941*	*
4	-0.0004	*-0.103*		-0.0374	*-1.922*	*
5	-0.0019	*-0.488*		-0.0393	*-1.980*	*
6	0.0016	*0.411*		-0.0377	*-1.864*	*
7	-0.0004	*-0.103*		-0.0381	*-1.850*	*
8	-0.0012	*-0.308*		-0.0393	*-1.875*	*
9	-0.0018	*-0.463*		-0.0411	*-1.928*	*
10	-0.0082	*-2.107*	**	-0.0493	*-2.275*	**
11	-0.0042	*-1.079*		-0.0535	*-2.430*	**
12	0.0052	*1.336*		-0.0483	*-2.160*	**
13	-0.0076	*-1.953*	*	-0.0559	*-2.463*	**
14	0.0019	*0.488*		-0.0540	*-2.345*	**
15	-0.0001	*-0.026*		-0.0541	*-2.317*	**
16	0.0009	*0.231*		-0.0532	*-2.247*	**
17	-0.0009	*-0.231*		-0.0541	*-2.255*	**
18	-0.0003	*-0.077*		-0.0544	*-2.238*	**
19	-0.0062	*-1.593*		-0.0606	*-2.462*	**
20	-0.0136	*-3.495*	***	-0.0742	*-2.978*	***

sample consist of 23 events from 12 different companies. None of the companies has dual shares so no further division of the sample is needed.

Table 15 presents the average abnormal and cumulative abnormal returns for the non-government owned firms when there is a change in the nominators in the 41-days event window. There are no statistically significant positive sample abnormal returns before the event day like there has not been in any of the previous tests either. Unlike in the other tests, the sample abnormal return on the event day 0.0095, with 0.0039 standard error, is statistically significant and positive on the 5-% level. This might be an indication of the last moment excessive buying before the holdings are revised and shareholders' nomination board places determined. Furthermore, the sample abnormal return two days after the event day is statistically significant and negative -0.0085, with almost the same magnitude as the event day mean abnormal return. This might also be a sign of an attempt to benefit short-term by achieving the place in the shareholders' nomination board and then selling the some of the shares after the nomination right is granted.

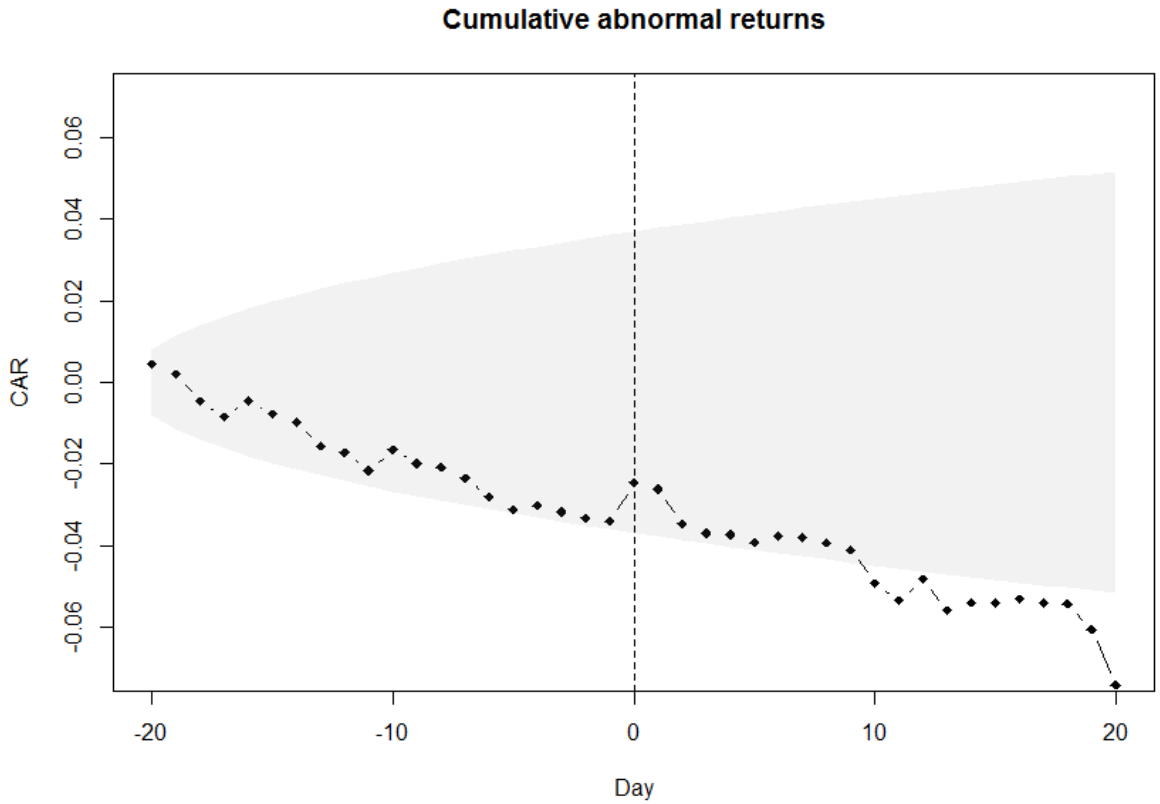

Figure 8. Sample CARs for non-government owned firms when there is a change in nominator

Even though the event day average abnormal return is significant and positive, the average CAR is significant and negative, though not at 5-% rather at the 10-% level, from 6 days before the event day until the day before the event. Hence, the positive average abnormal return at the holdings revision date is not as compelling evidence against the null hypothesis since the average cumulative abnormal return before the event is significant and negative, and the event day sample CAR remains negative -0.0246. The pattern of cumulative abnormal returns can be seen from the graph of CARs in Figure 8.

Table 16. Sample abnormal and cumulative abnormal returns for non-government owned firms when nominator changes (event window = 11 trading days)

Abnormal Returns & CARs - t-stat table (n = 23)
*Critical values: 10-% level (1.717) *, 5-% level (2.074) **, and 1-% level (2.819) ****

	Abnormal returns			**CARs**	
Day	AR	*t-value*		CAR	*t-value*
-5	-0.0030	*-0.752*		-0.0030	*-0.752*
-4	0.0010	*0.251*		-0.0020	*-0.354*
-3	-0.0011	*-0.276*		-0.0031	*-0.448*
-2	-0.0016	*-0.401*		-0.0048	*-0.601*
-1	-0.0008	*-0.200*		-0.0056	*-0.627*
0	0.0096	*2.405*	**	0.0040	*0.409*
1	-0.0013	*-0.326*		0.0027	*0.256*
2	-0.0083	*-2.079*	**	-0.0056	*-0.496*
3	-0.0024	*-0.601*		-0.0080	*-0.668*
4	0.0001	*0.025*		-0.0079	*-0.626*
5	-0.0017	*-0.426*		-0.0096	*-0.725*

As opposed to the longer 41-days event window, the sample CAR remains positive 0.0040 in the shorter 11-days event window, reported in Table 16. Still, the event day sample CAR does not differ statistically from zero. Other than the event day positive return of 0.0096 and two days after the event negative -0.0083 returns, the sample abnormal returns are close to zero near the event day, see Figure 9.

The test statistics indicate that there are some evidence against the fourth null hypothesis. The event day significant and positive return is a sign of positive abnormal returns before the holdings revision. Additionally, the significant negative return of same magnitude two days after the event might be a sign that some party bought the shares just for ensuring their place in the shareholders' nomination board and then dumped the shares right after the holdings revision was conducted. On the other hand, the significant and negative sample CARs before the event day are more likely signs of excessive selling rather than buying the shares, which

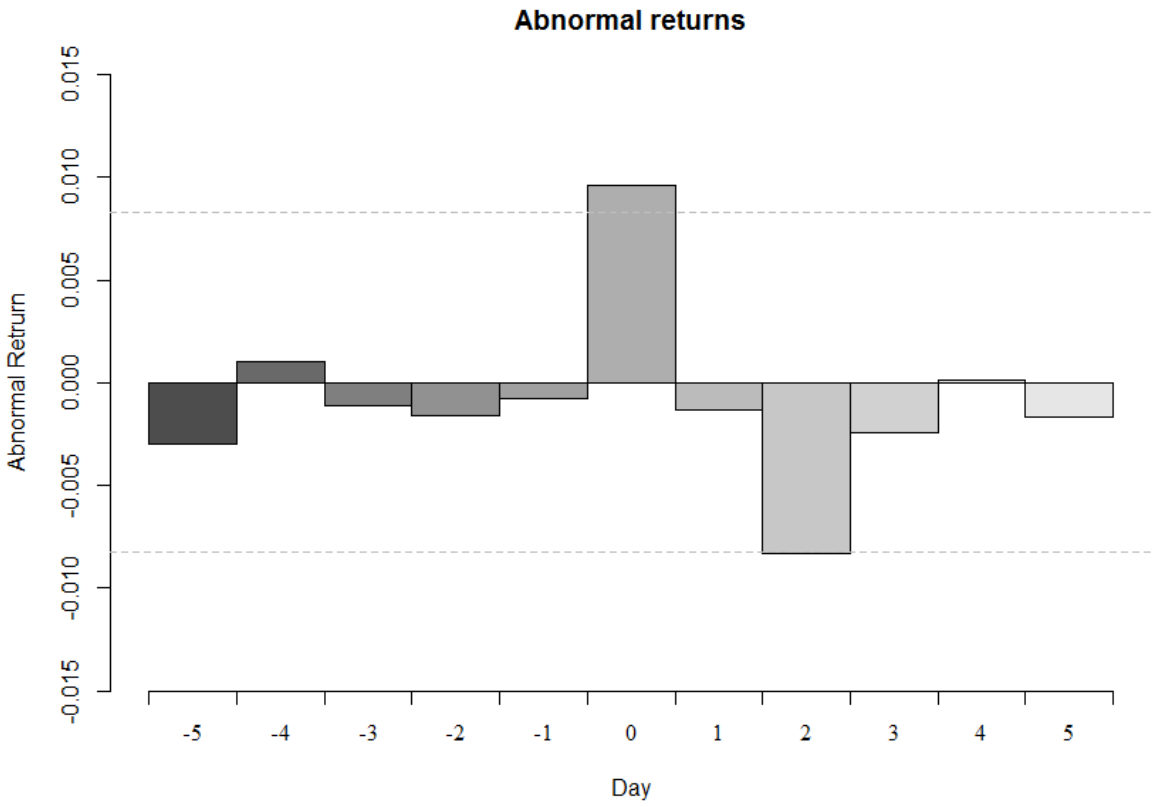

Figure 9. Sample abnormal returns for non-government owned companies when there is a change in nominator (event window = 11 trading days)

might indicate that no competition that drives the share price up exists. Out of the two contradictory results, the latter, the negative sample CARs before the holdings revision date is an evidence against positive abnormal returns in a longer horizon before the event. Then again, the positive event day sample abnormal return is an evidence for short-term positive abnormal returns that might be due to last chance buying attempt to secure the nomination right.

A further analysis of ownership changes around the holdings revision dates does not suggest that there would be any last moment trading to secure the place in the shareholders' nomination board among the sample firms. Rather the changes of nominators are due to ownership changes earlier on the year. Hence, even though there exist some evidence against the null hypothesis, there are no hints that the event day sample abnormal returns would be caused by the competition for the nomination rights. More likely, the noise in the data causes the event day sample abnormal return and therefore the null hypothesis should not be rejected.

8. Conclusions

This study contributes to the field of corporate governance academic research by examining a unique corporate governance mechanism, the shareholders' nomination boards. It is the first comprehensive study of the shareholders' nomination boards in Finland, even though the corporate governance method has been in use for over a decade. Additionally, the thesis evaluates whether changes in the nominators of shareholders' nomination board have an effect on the changes of the following board members. Finally, a study about the nomination practices and abnormal returns around the holdings revision date is conducted.

As a pioneering study, this thesis gives the first detailed description about the shareholders' nomination boards in Finland. The corporate governance model has existed since 2004, and at the end of 2016, already 41 companies (37 of them follow the Finnish Corporate Governance Code) had adopted it. The recent two changes in the Finnish Corporate Governance Code have been key factors driving the implementation of shareholders' nomination boards, especially among smaller and non-government owned companies. The firms that use shareholders' nomination board are very different in size and come from various industries. A shared feature of these companies is highly concentrated ownership among the largest owners, the largest three shareholders own on average 37% of all the votes. Similarly, the nomination power is concentrated to the hands of few since the three largest nominators; Keskinäinen Eläkevakuutusyhtiö Ilmarinen, Finnish Government, and Keskinäinen Työeläkevakuutusyhtiö Varma, have chosen more than half of all the nominees in the past. The largest ten nominators measured by all-time nomination count consist of four pension funds, three private investment groups, the investment funds of Nordea Bank and OP Group, as well as the Finnish Government.

Additionally, the results from the tests about nominator changes effect on the subsequent board member changes indicate that nomination boards work as intended. Since the relationship is positive and statistically significant the largest shareholders', as nominees of the nominators, do actually have authority over the company management. Even though the power is indirect, through the board member election process, it still has a significant role in the corporate governance.

The empirical research questions were motivated by Carlsson (2007). In his paper, Carlsson examined shareholders' nomination boards, or "valberedningar" in Sweden, where majority of the companies has implemented them, and some short-term activist investors have exploited

the nomination power to make quick profits. To find out whether evidences about the 'hit-and-run' philosophy exist in Finland, the abnormal returns around the holdings revision dates were studied. The empirical study consist of four testable hypothesis. The first hypothesis tests for the positive abnormal returns before the holdings revision dates in general. In the second hypothesis, the aim is to examine, whether a change in the shareholders' nomination board would lead to abnormal returns, while the third hypothesis tests whether the ownership structure has an effect on the results. Finally, the last hypothesis is a combination of the second and third hypothesis, testing their joint effect.

The results are a relief since none of the tests indicates that shareholders' nomination boards would be exploited as a loophole for short-term gains in Finland. There is no evidence against the first three hypotheses, and they all remain valid. In the fourth hypothesis test, the results were inconsistent due to the statistically significant positive event day abnormal. A further analysis of the ownership changes ruled out the possibility that the inconsistent results would be caused by the largest shareholders' last minute trading.

Another interesting finding of the thesis is that firms with shareholders' nomination board appear to produce negative cumulative abnormal returns around the holdings revision date in the medium-term. The result is counterintuitive since the negative cumulative abnormal returns become statistically significant even before the holdings revision dates, in some of the tests, indicating that the shareholders are selling more shares just before the nomination board places are determined. One plausible explanation might be the highly concentrated ownership among the companies with shareholders nomination board, leading to a situation where the minority shareholders might not care at all about the shareholders' nomination board places in their investment decisions.

Further research about the shareholders' nomination boards should be conducted, as the method has solidified its stance among the listed companies in Finland. The effect of obtaining the corporate governance method to firm profitability or shareholder returns opens an interesting field for further investigations. In addition, the relationship between different nomination methods and the board diversity as well as turnover is another avenue for the future studies. Finally, comparison between board nominations that are prepared by shareholders and nominations that are prepared by a subcommittee of a board offers many fruitful opportunities for future studies.

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